Figure 14-12.—Video switcher.

1. **Give a "ready" or "standby" cue whenever possible.** Your doing so tells the camera operator to hold a particular shot and that airing is eminent. Additionally, it is a good practice that you give a "ready" command just before a camera movement. For instance, if the talent is seated and is scheduled to getup and move to the left, you would say, "Camera 3, ready to pan right with the talent."

2. **Identify each camera by number.** You will know each camera operator by name, but you should issue camera commands using the appropriate camera number.

3. **Begin a command with the camera number.** Do not say, "Ready to pan right with the talent, Camera 3.

4. **Be specific when issuing commands.** For example, the command "Camera 1, zoom out" is too vague for production work. Instead, you should say: "Camera 1, zoom out for a bust shot."

Switcher Commands

The director should follow the same basic guidelines for camera commands when issuing commands to the video and audio switchers. In some situations, the director will give switcher commands while actually performing the switching functions himself. This is done primarily to alert team members of video and audio transitions.

Try to economize your words when you issue switcher commands. For instance, instead of saying, "Ready to cut to Camera 2 . . . Cut to Camera 2," say "Ready to take 2 ... take 2." Your using fewer words takes less time and cuts down on the possibility of confusing team members.

14-13

In addition you should give commands to the video switcher *last*. This is because the video switcher is normally positioned close to the director and needs less time to respond to a command than camera operators or the floor manager. Give your commands in this order:

1. Audio switcher

2. Talent

3. Video switcher

TELEVISION VISUALS

LEARNING OBJECTIVE: Recognize the technical requirements and main types of television visuals.

As a television broadcaster, you must be able to think visually in order to make the most of the television medium. In some cases, visuals can tell the entire story by themselves and should be an integral part of a production instead of an afterthought. You may have heard the cliche, "One picture is worth a thousand words." This is true because effective visuals will help you tell the story with more clarity. A viewer's imagination can actually provide the "soundtrack," sometimes enhanced by narration (used sparingly) and television dialogue.

The term visuals maybe broken into the following three subgroups:

● Graphics (maps, charts, diagrams, illustrations, printed IDs, outlines and summaries and CG information)

● Photographic techniques (still photographs)

● Television backdrops, props, scenery and subject/talent visual information not included in the first two categories

TECHNICAL REQUIREMENTS

Before you plan or use any type of television visual, you must be aware of the technical limitations and guidelines involved Even if you do not actually design or prepare the visuals, you must be able to guide your artist and understand the limitations of visuals.

It is important for you to understand how visuals must be tailored for television before producing or selecting them. For example, a novice television broadcaster may see a random visual he likes and try to use it immediately, while a seasoned veteran will base his decision on more scientific guidelines and will not rely on first impressions.

Any producer of television programs learns quickly that he needs a "working knowledge" of many contributory fields. One of these is graphic arts. All television shows use graphic materials — title cards, photographs, illustrations, charts and maps — just to name a few. Graphic materials greatly enhance news and feature productions, spot announcements and virtually all types of television programs. Keep in mind that, in television it is important for you to present information visually as often as possible since people remember visual information longer than the spoken word. Without visuals, you lose the force of this powerful medium.

Whether written, pictorial, diagrammatic or sheer design, visuals have a place in almost every television production. In preparing visuals for television, you should pay close attention to the aspect ratio, scanning area, essential area, border area and the size of the visuals.

Aspect Ratio

The aspect ratio of any television screen, regardless of its physical size, is 3:4. This means the television screen is divided into three units high and four units wide. The visual elements should be kept in a format size that will complement either 6:8 or 9:12. These aspect ratios will help you keep the materials and objects within the 3:4 aspect ratio format shown in figure 14-13. A television visual prepared within this aspect ratio will be seen in its entirety on the television screen. Conversely, think about what would happen if you were to shoot a vertical photograph without the proper aspect ratio. The photograph would lose a major portion of its
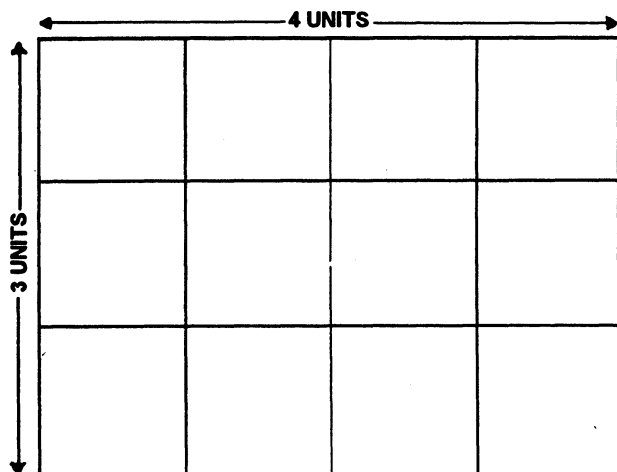

Figure 14-13.—Television aspect ratio.

information from either the top or bottom, or its sides, and visually, it would look poor on the television screen.

Scanning Area

The total area seen by the camera is called the scanning area. This image is transmitted fully, but the outer edges and the corners usually do not appear on the home television set because of the shape of the picture tube. A properly aligned television receiver will display all scanned information at the top and bottom center of the picture, but will crop corners because of the nonsquare corners of the picture tube.

The common mistake many new television broadcasters make is allowing too much headroom at the top of the picture. Remember: the home receiver sees everything at the top center, so do not overcompensate the same way you do for edge and comer cropping.

Essential Area

The portion of the picture that reaches the viewer must include all of the important information — this is known as the essential area. All visuals have a scanning area and an essential area. The scanning area is the entire picture from top to bottom and from side to side. The essential area is the meat of the picture — the main information within that picture area. Both the scanning and essential areas of a picture are shown in figure 14-14.

Border Area

The border area is another important area of the television picture. Graphic artwork should have a border around the scanning area for the following reasons:

1. It helps prevent the picture from being damaged if dropped.

2. It helps protect the artwork from fingerprints and smudges.

3. It may prevent your audience from seeing past the card to some behind-the-scenes activity if the camera operator did not have time to frame the shot properly.

4. It serves as a "bleed-off" area for overscanned sets. The excess border contains no essential information.

Size

There is no specific size of studio title cards or other television visuals. However, a generally accepted size is 11 by 14 inches. It is best that all visuals be made the same size for storage purposes. The 11- by 14-inch size fits well in a standard file cabinet. The cards should be numbered with a piece of marking tape on the edge. Stagger these tabs for easy access.

A visual that is 11 by 14 inches offers the following advantages:

1. It allows an ample 2-inch handling border so fingerprints and smudges will not damage the primary information.

2. It leaves a 9- by 12-inch working area for both the camera operator and artist.

3. It is compatible with the aspect ratio requirement of 3:4, thus incorporating a measure of safety.

It is also wise for you to mark off an additional 10 or 15 percent inside this 9- by 12-inch area. Your doing this will give you a copy area of about 7 1/2 by 10 inches and compensates for the picture area lost because of cropping (transmission loss) on the home television receiver (fig. 14-15).
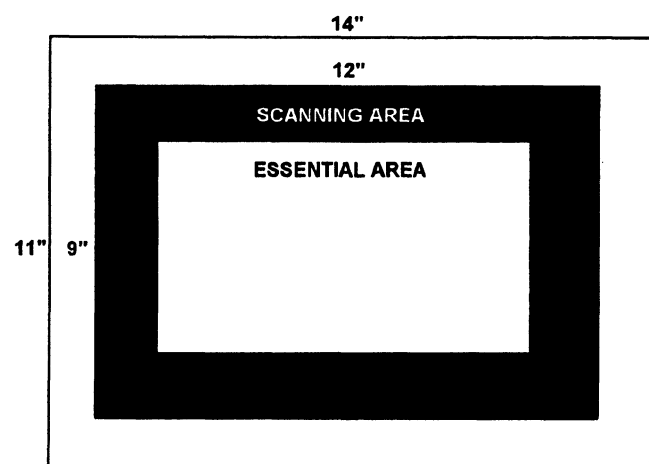

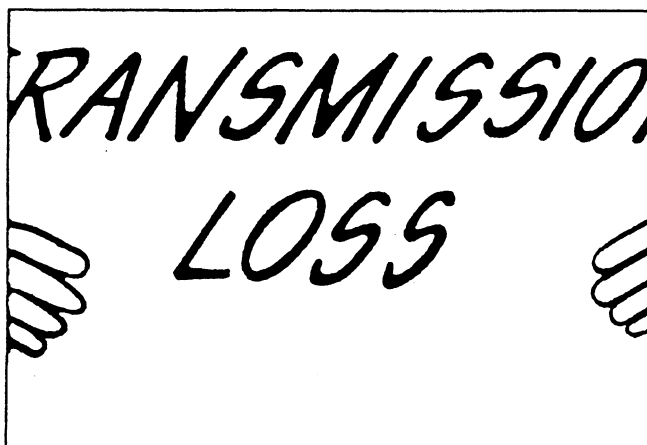**Figure 14-14.—Scanning and essential areas of a television picture**

Figure 14-15.—Transmission loss.

Remember to use the scanning area! The total scanning area is visible on most television sets, but there is a 10-percent loss on others. Therefore, keep all pertinent information within the essential or "safe" area. This is especially critical when you use words.

TYPES OF VISUALS

The types and uses of visuals are limited only by your imagination. Visuals come in various forms, each having a name that makes it easily identifiable to production and artwork staff members.

The following is a list of the major types of television visuals:

- studio card
- Plain title card
- Combination title card
- Super/key card
- Chroma key card
- Maps and charts
- Character generator
- Computer graphics

Studio Card

The studio card may be a mounted photograph or an illustration. It sits on an easel and maybe a plain card (words only) or an illustration or picture with words. Combining words and illustrations requires the coordination of two video sources, such as a character generator and art.

Plain Title Card

The plain title card has printed lettering (without any pictorial background), such as the title of the show, the name of the performers and producer, and so forth. Rich, deep color backgrounds with light lettering make reading easy.

Combination Title Card

The combination title card has lettering against pictorial information for the background. The picture may be either artwork or photography. The lettering may be either on the card itself or on an overlay.

Super/Key Card

During the showing of a super/key card, the card lettering is superimposed electronically over another background (or over another picture) from either another camera or from a film chain camera. This technique is an accepted form for placing the name of the subject on the air while the subject is talking. Use only simple, bold letters and try to restrict the amount of information on the super/key card. Normally you should avoid white lettering on a black background, because the contrast between the two is too great. Nonetheless, in this case, the lettering must be white and the background black.

Use caution when you plan the super/key card. You must consider how two camera shots will look as one picture. In addition, you should place lettering in the lower third of the card and center the card on the picture. This is done so you will not obstruct the background or the main action.

Chroma Key Card

The chroma key card is similar to the super card, except the background for the lettering is usually blue instead of black and the letters are i-reprinted on the card The background of the card may be any color. However, most television producers use a chroma-blue background color, because it makes skin tones appear natural and suppresses picture distortion.

Through electronic means, the chroma-blue background becomes transparent during the matting process, only showing the typically white or yellow letters. The camera picture from the second camera shows through without interfering with the foreground image. The chroma key matting process appears to the viewer as a rear screen projection, such as when the picture is keyed (shown) behind an announcer or is a boxed support graphic inserted alongside the announcer. The video source may be a VCR or a live television camera shooting a studio card.

Maps and Charts

Maps and charts are also important visual aids for television programs, especially newscasts.
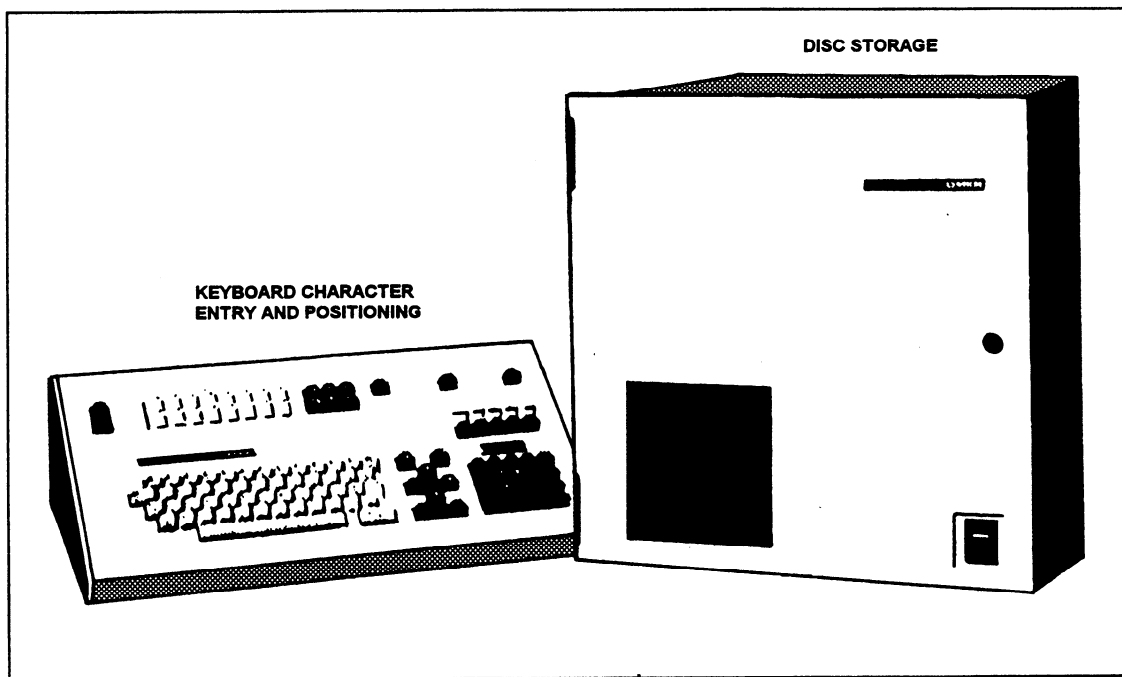
Figure 14-16.—Character generator (CG).

You can limit details to the essential areas by using simplified drawings. For example, if you want to emphasize the state of Colorado on a map of the United States, you could retrace the borders and darken the state area with green or blue tints.

Keep written copy on charts to a minimum. Maximum clarity with minimum essentials must be your chief objective.

Character Generator

When you have a lot of printed information to air, such as sports scores or closing credits, you should use a character generator (CG) (fig. 14-16). The CG is a computer graphics system used widely in closed circuit and broadcast television. It creates letters and numbers in a variety of sizes and fonts and requires no special skill for the user to make flawless letters.

A CG has a solid-state keyboard similar in appearance to a microcomputer keyboard, except it contains additional keys for specific CG functions. As you create text, you may store it in RAM (random access memory) and recall it as needed. Since RAM is cleared when microcomputers are turned off, most CGs use a floppy or hard disk drive system for permanent text storage.

Some of the more advanced CGs feature 14 to 16 lines of 32 characters within the frill-screen scanning area line-by-line memory recall, automatic centering, word flash, word or line underline, stand alone titling, titling over video and two-speed roll (or crawl) through all or part of the memory. You may even program the letters in certain color arrangements by using a colorizer. A cursor helps you move information to any location on the screen.

Although the CG is a timely means to display information, you should not rule out the use of other graphic support material.

Computer Graphics

Computer graphics, the newest elements of the television medium, have all but replaced 35mm slides for television work. This process starts with an electronic picture recorded on videotape. The computer operator converts the picture into a digital code format and stores it either on the hard disk drive or a floppy drive. When the image is needed, a graphic artist retrieves it and converts it into an electronic picture. Now he may paint or draw a picture using an electronic pen and palette. The graphic artist can add or delete information and change the colors of the picture and letters at will while "on-the- air." Some advanced computer graphic systems have a wide range of colors and can produce detailed animation.
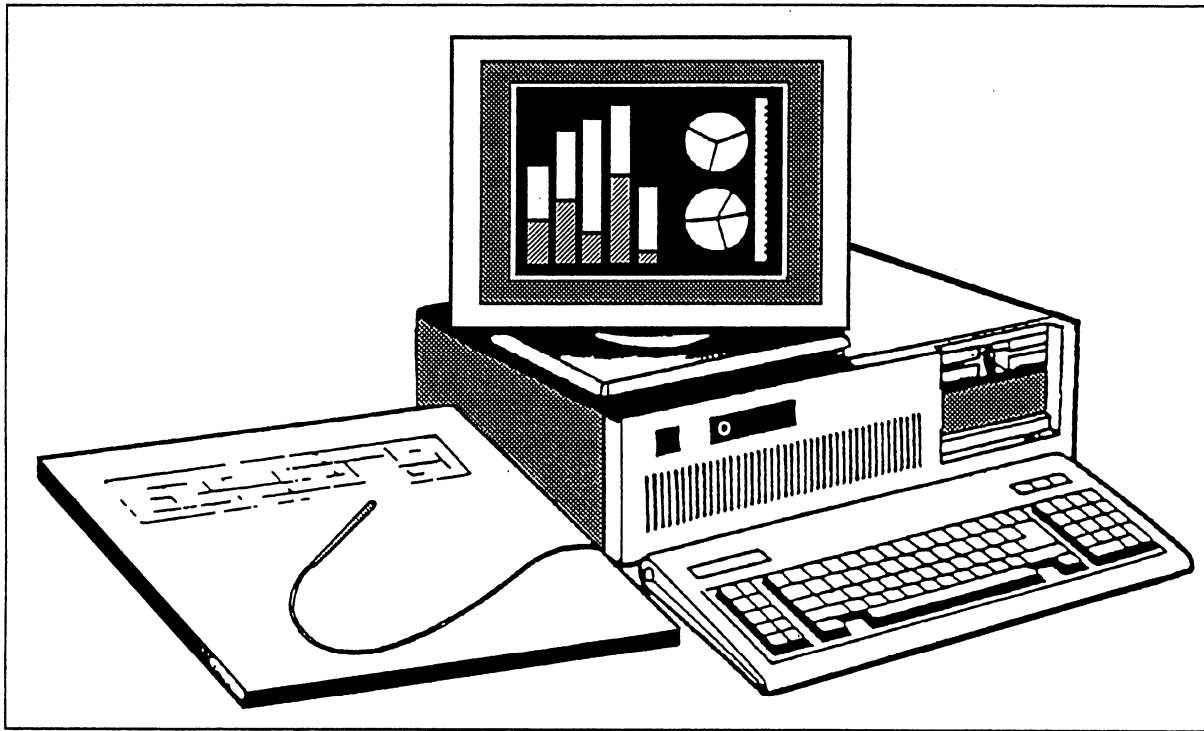
Figure 14-17.—Computer graphic system.

A computer graphic system is shown in figure 14-17.

PREPARING TELEVISION VISUALS

LEARNING OBJECTIVE: Identify the techniques used to prepare television visuals.

Regardless of the purpose or format of your television visual, you must consider the following basic aesthetic elements:

- Simplicity
- Contrast
- Balance and composition
- Lettering

SIMPLICITY

The old adage, "Keep It Short and Simple" (KISS), certainly applies when you create television visuals. Your visual should be uncomplicated and easily recognized. Do not make the viewer work too hard to understand what he is seeing. For example, viewers normally will ignore a visual with too much lettering. Additionally, try to keep colors to a minimum.

All copy or lettering must be readable. Fancy fonts may look good on paper, but they might not permit the viewer to understand what you are trying to convey.

Sizing of the subject in the picture also is important. "Keep the primary subject somewhat large within the picture that you are framing. Do not make the viewer strain to read or see the subject. A good subject size is about one-half inch in height on a 19-inch monitor.

CONTRAST

High definition, or contrast quality, is important for reproduction over a television system. Contrast in visuals should be sharp but not excessive. Avoid large areas of white. The pickup tube(s) of the camera will transmit glitter and flair when you shoot high-intensity reflected light, especially during camera movement. This also may introduce audio noise into the television picture.

The human eye can identify about 100 different shades of gray. The television camera clearly identifies only about 10 shades. Since the brightest area can be no more than 20 times as bright as the darkest area, you must be careful when using pictures and visuals that have high contrast.

You also should consider how color will appear on a black-and-white (monochrome) television set. Color material will appear as shades of gray on a monochrome
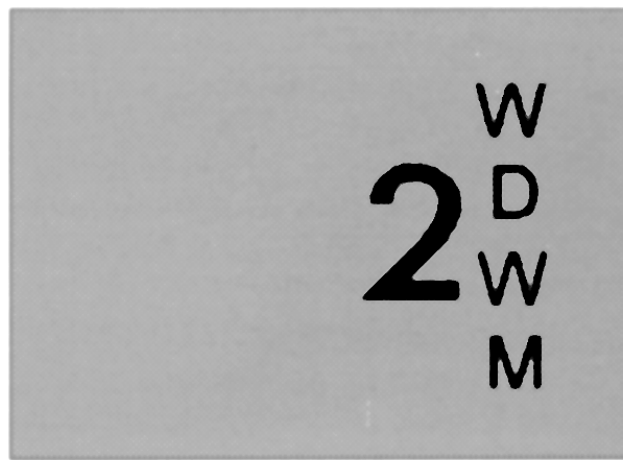
14-18

UNBALANCED   **BALANCED**

Figure 14-18.—Unbalanced (left) and balanced station identification visual.

television set and must be used according to its gray scale value. The best way to test colors is to check them with a color television camera and monitor. You will find that brown, purple, dark blue and black appear black on a monochrome television; red, medium blue and medium green appear dark gray; light blue, chartreuse, gold and orange appear light gray; and pastels, bright yellow, light gray and tan appear almost white.

Even a color television system acts as a filter — it only sees a portion of the hue (color) and saturation (color strength) that the human eye can see. Most color cameras have trouble with the colors red and orange. Saturated colors cause excessive video noise or color stretching over the entire screen. Stripes or color banding also may show up as color vibrations, thus disrupting the picture. Stay with basic, solid colors — primarily blues and greens — and avoid supersaturated reds and oranges.

Studies have revealed that color may influence our judgments of size, weight and temperature, and even affect our psychological state of mind. Colors are viewed as "high energy" or "low energy." Cool colors are considered low energy; warm colors are termed "high energy." Make sure you avoid using two colors that have the same value on the gray scale.

BALANCE AND COMPOSITION

Balance and composition are also important factors when you design television visuals. For full screen visuals, make sure the design is balanced and aesthetically pleasing to the viewer. Try to visualize the final, on-air picture before you use it in a production. An example is the station identification visual shown in figure 14-18.

LETTERING

Letters too small or too thin will not be seen by the viewer. A general rule of thumb is not to use letters smaller than 15 to 20 percent of the essential area. If the visual is too busy or includes too much material, it will probably distract your audience. Five or six lines of 15 to 20 characters is considered the most a viewer can handle at onetime.

TELEVISION MICROPHONES

LEARNING 0BJECTIVE: Recognize the types of microphones used in television productions.

Sound plays a vital role in the television communication process. Most human intelligence is transmitted through sound; therefore, good quality sound is an important part of television. However, good quality sound is rather difficult to achieve at times because sound sources may be in motion, talent may speak to the camera and not into the microphone and microphones must sometimes be hidden from the view of the camera. To help solve these audio problems, you should have a basic understanding of television microphones.

Microphones are usually classified according to the way they pick up sound, also known as their polar pattern. Sound in physical terms is the vibration of air particles or small fluctuations of air pressure that spread like waves from a source of sound. Human ears respond to this change in pressure within a sound field. Similar to a human ear, microphones respond to the change in air pressure created by sound waves and convert the fluctuations of pressure into electrical current.
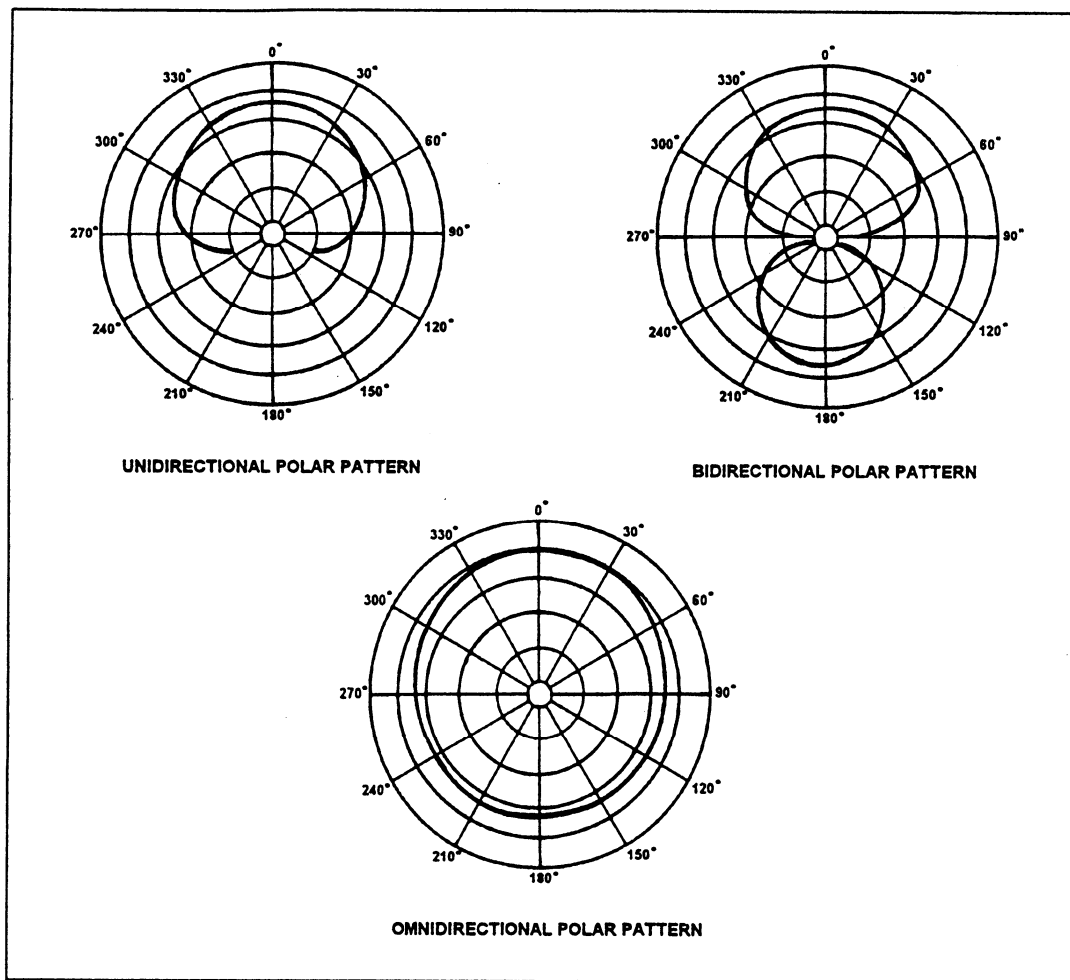
Figure 14-19.—Microphone polar patterns.

POLAR PATTERNS

The pickup, or polar pattern, of a microphone is the shape of the area around it where it picks up sounds with maximum fidelity and volume. Nearly all microphones can pick up sounds from areas outside the ideal pattern, but their quality is not as good. For best results, the sound source should be within the pickup pattern, generating enough volume to allow the audio switcher to keep the volume control pot at a minimal level.

Microphones are classified according to the following three basic polar patterns:

- Unidirectional

- Omnidirectional

- Bidirectional

Unidirectional

The unidirectional microphone picks up sound from only one direction. Because of this characteristic, the unidirectional microphone is used most frequently for television work. It is used by aiming it in the direction of the sound source being recorded. One advantage to the unidirectional microphone is its ability to reject unwanted sounds at the side and rear of the direction the microphone is aimed.

Omnidirectional

The omnidirectional (or nondirectional) micro-phone is live in all directions. This type of microphone has sensitivity characteristics in which sound is picked up in a 360-degree radius. The use of this microphone in television production is limited; however, in certain situations, you may use it to create a specific sound presence. One example is recording crowd noise for a sports production.

Bidirectional

As the name implies, the bidirectional microphone picks up sound in two directions. This type of microphone is used primarily in the broadcast or recording studio. It is also used for critical sound reinforcement applications in which front and rear
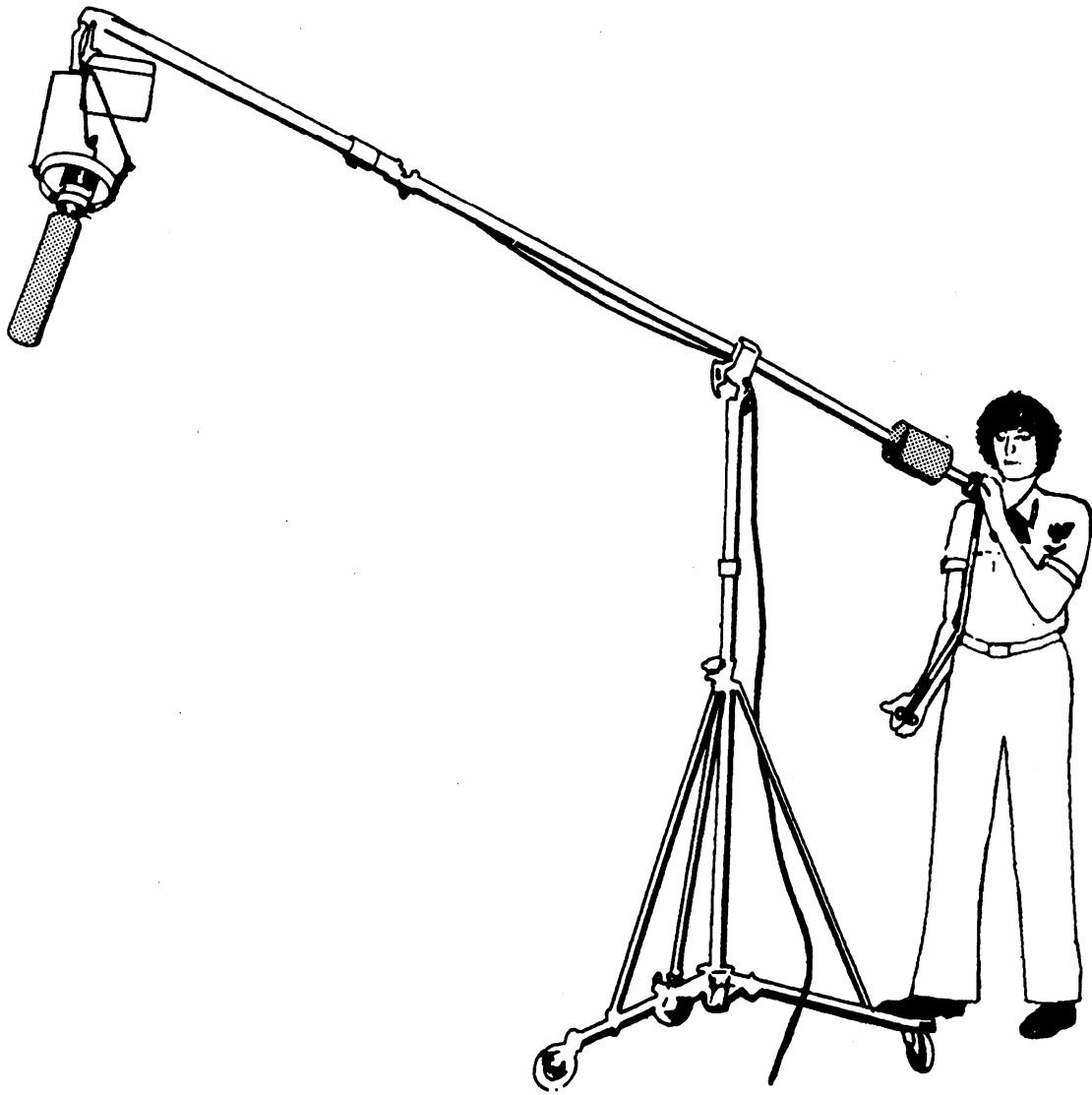
Figure 14-20.—Giraffe boom.

pickup and greatly reduced side pickup are desirable. The bidirectional microphone is ideal for such applications as "across the table" interviews or dialogue recording under studio conditions.

The polar patterns of all three microphones are shown in figure 14-19.

MOBILE MICROPHONES

During your tour as a television broadcaster, you will use the following four basic types of mobile microphones:

- Boom

- Hand

- Lavaliere

- Wireless

Boom

The most flexible mobile microphone is one that is attached to a microphone boom. A boom, in its simplest form, is a hand-held pole to which a unidirectional microphone is attached. It permits quick and smooth movement of the microphone from spot to spot anywhere on the set. Most booms have a telescoping feature that allows the operator to extend or retract the microphone. Some booms have controls at the end so the operator can rotate the microphone for directional sound pickup.

Another advantage of the boom is its mobility on the set. The boom operator can move the entire boom assembly from location to location and follow sound sources without an interruption to sound pickup. The giraffe boom (fig. 14-20) is suited perfectly for this task.

Figure 14-21.—Hand microphone.

Figure 14-22.—Lavaliere microphone.

As a television boom operator, your primary responsibility is to keep the microphone as close to the sound source as possible without getting the microphone or its shadow in the picture. This requires coordination and anticipation. You must keep the microphone in front of the sound source, listen to the director's signals, watch camera movements, be aware of what lenses are in use, avoid undesirable boom shadows and anticipate the talent's movement — all at the same time.

Hand

The hand microphone (fig. 14-21) is used for many television productions, especially ENG shoots. A hand microphone is seen on camera, and therefore, it can be held very close to the sound source. It is especially useful amidst noisy surroundings, such as the flight line or the machine shop aboard ship. In such cases, good audio pickup is still achieved by holding a unidirectional microphone very close to whomever is speaking. A hand microphone is valuable in audience participation programs, such as Navy Relief and Combined Federal Campaign telethons.
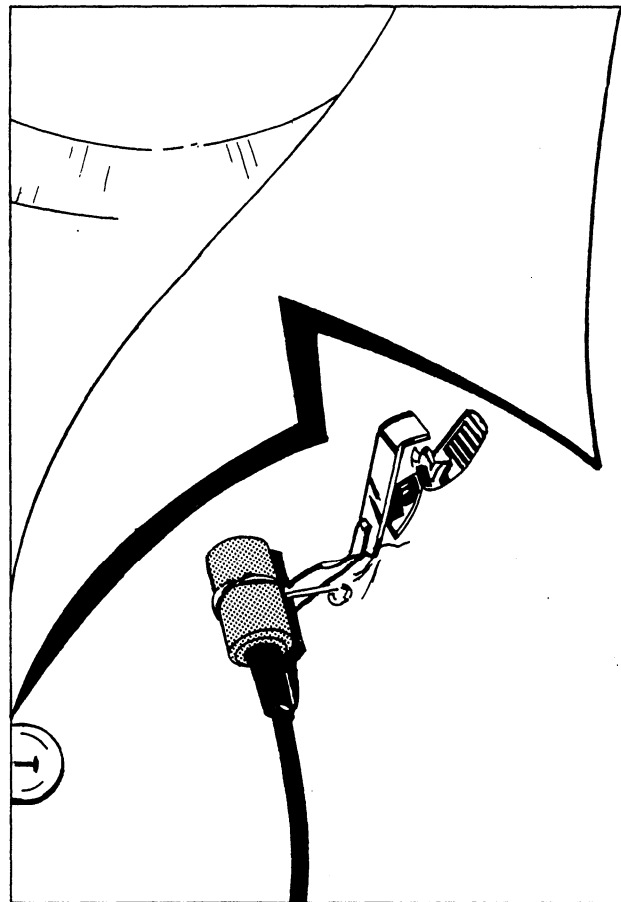
Lavaliere

During reporter standups, newscasts, interviews and similar production applications, the lavaliere microphone (fig. 14-22) is more appropriate than the use of a hand microphone. Lavaliere microphones are small and unobtrusive. They are normally taped or clipped to an article of clothing on the talent's chest and are ideal when microphone concealment, individual mobility or the free use of hands is required.

Although concealment is an attractive option of the lavaliere microphone, you should not place it entirely under clothing. Clothing acts as a falter and any sound that penetrates the "filter" will be muffled when reproduced. Clothing rubbing against the microphone also can create crackling noises.

Some lavaliere microphones are termed *dual redundancy,* because there are actually two lavalieres hooked to the same clip (fig. 14-23). Only one microphone is live, but the other serves as a backup in case the primary microphone fails. For this reason, you

Figure 14-23.—Dual redundancy lavaliere microphone.

should not connect both microphones to the same audio slider in the audio control room.

Wireless

The wireless microphone, as its name implies, works without cables. It is a standard lavaliere microphone connected to a battery-powered radio transmitter. The talent may clip the transmitter to his belt or conceal it under an article of clothing. A small antenna connected to the transmitter sends the audio signal on an FM frequency to the receiver in the audio control room. The signal is then fed to the audio switcher, who controls the input like any other sound source.

Be careful when you use wireless microphones because they may deliver unwanted audio from radio freqencies (RF) in the area. A wireless microphone receiver and transmitter are shown in figure 14-24.

STATIONARY MICROPHONES

In addition to the mobile microphone group, you will become familiar with the following four stationary microphones:

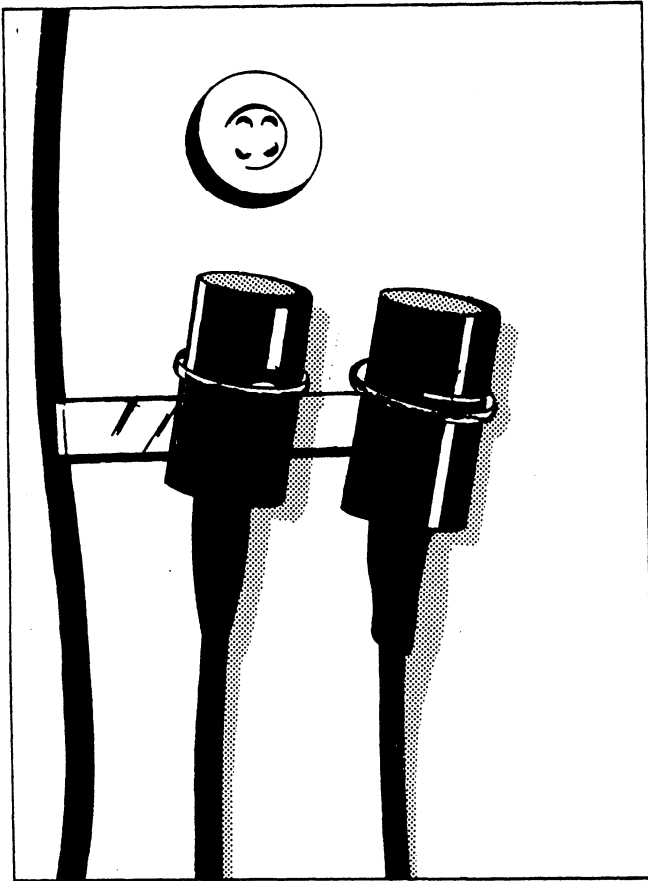- Desk
- Stand
- Hanging
- Hidden

Figure 14-24.—Wireless microphone receiver and transmitter.
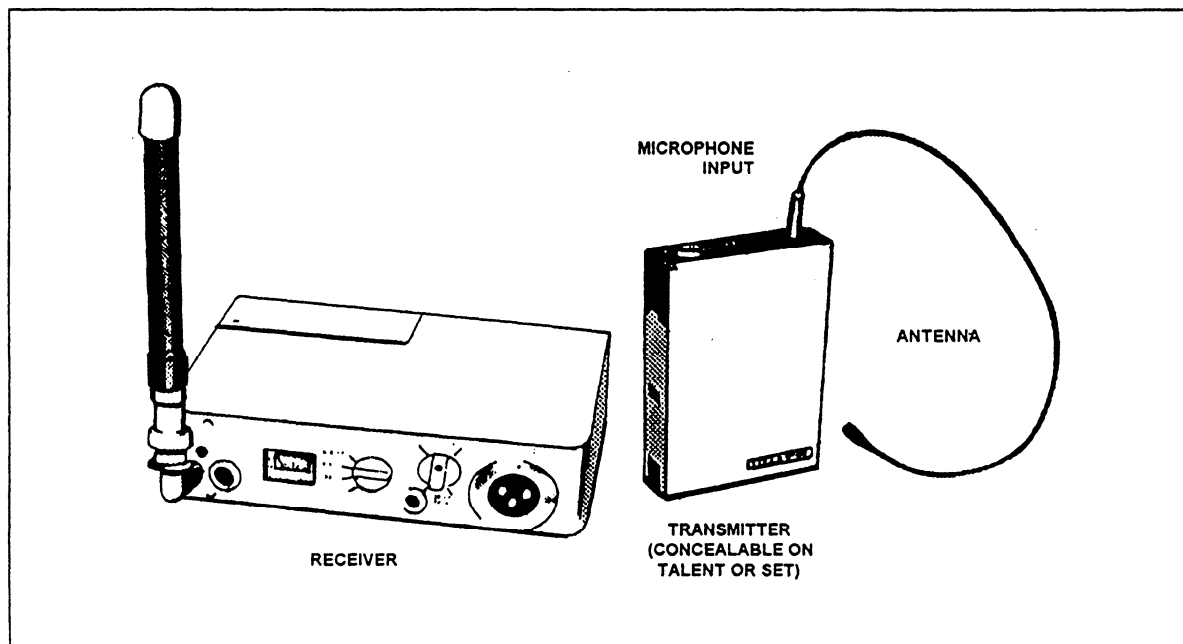
Figure 14-25.—Desk microphone.

Figure 14-26.—Desk microphone placement.

Desk

Desk microphones (fig. 14-25) are widely used at public hearings, panel discussions and other productions where the talent is working from behind a desk or lectern. Any microphone can be used as a desk microphone, as long as you attach it to a suitable stand.

Since the talent is heard and seen in television, the placement of the desk microphone is influenced by the camera. If the microphone is placed directly in front of the talent, it may obstruct his face. Further, sound pickup will be influenced when the talent turns his head.

A good starting point for placing the desk microphone is about one and one-half feet from the talent and pointed at his collarbone, as shown in figure 14-26. If the talent turns his head to look at the television monitor or another talent, try to locate the microphone somewhat to that side.

The actual number of desk microphones needed and their placement depends on the quality of the sound produced. If one desk microphone will suiffice, then use just one.

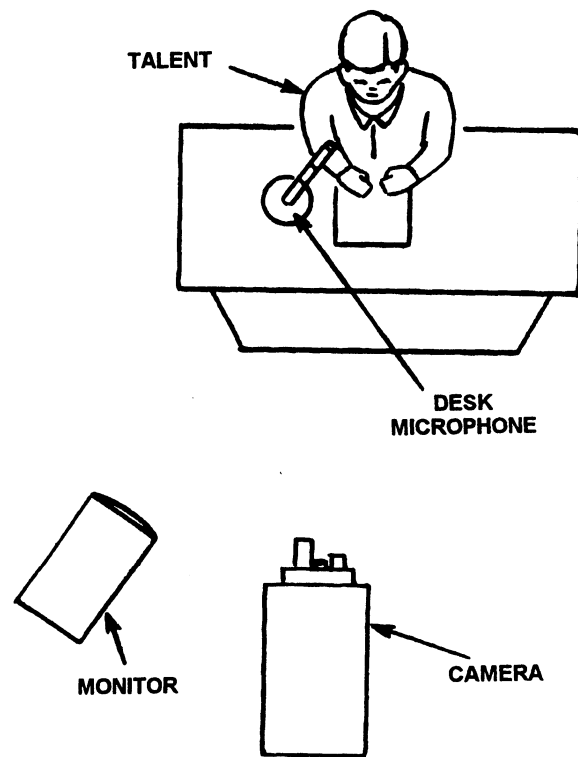You should conceal the cables of desk microphones. If a particular desk or table is used almost exclusively with a desk microphone, you can drill a hole into its top and drop the cable to the floor.

Stand

Stand microphones are used when the sound source is immobile and the microphone maybe seen on camera.

For instance, you can use several stand microphones to pickup the sound of a vocal or instrumental group. You may also use a stand microphone for the master of ceremonies (MC).

The placement of stand microphones is determined by sound quality, rather than by picture factors. However, stand microphones should be placed so that they do not impede camera movement or picture quality.

Hanging

Hanging microphones are often used when a boom microphone is impractical because of lack of space or when a large set will not permit rapid boom movement. It is simply a microphone hung from the ceiling or overhead by its cable, placing it out of normal camera range.

The sound source should be fairly stationary when you use a single hanging microphone. You can use a hanging microphone for panel discussions and other

types of productions where the talent remains immobile at the time of sound pickup. Several microphones located about the set can accommodate moving talents, but the talents must position themselves near the microphone before speaking.

Most hanging microphones do not produce good audio. If placed too close to walls or overheads, an echo or distorted audio is likely to occur.

Hidden

The sound quality of hidden microphones is mediocre at best, and frequently the object they are hidden in or behind distorts the sound. For this reason, you should use hidden microphones sparingly.

One type of hidden microphone is called a **contact microphone,** because it is in direct contact with the object producing the desired sound effect. An example is a microphone attached to a quick-acting watertight door to pickup the sound of the handwheel and dogs.

TELEVISION LIGHTING

LEARNING OBJECTIVE: Identify the principles of television lighting.

Earlier in this chapter, we noted that the television camera changes various levels of light reflected from objects in the scene into electrical impulses of varying strength. Therefore, the primary objective in any television lighting setup is to ensure sufficient illumination for the correct operation of the television camera. However, at the same time, television lighting must support or even establish the atmosphere of the set or scene.

Television lighting essentially follows the same principles as photographic lighting (Chapter 11). For the sake of clarity, however, we will take a brief look at lighting as it applies to this medium.

COLOR TEMPERATURE

Before we cover the principles of television lighting, we must address color temperature briefly.

Color temperature is the amount of certain colors that make up a particular white light measured in degrees Kelvin (K). Since the television camera changes images into electronic impulses, the wavelengths of light that vibrate at various frequencies and makeup the different hues or colors will have an effect on the output of the camera.

The simplest way to think of color temperature, without getting into complicated formulas, is to say that light of a lower color temperature appears more toward the orange end of the scale, while light of a higher color temperature appears more toward the blue end of the scale.

Studio lighting is standardized at 3200°K Daylight sources are balanced in the range of 5000°K to 7000°K You do not have to know what a degree Kelvin is specifically, as long as you accept it as a unit of measure and know how color temperature effects the color television picture.

STUDIO LIGHTING

In this section, we cover the following factors that contribute to proper studio lighting:

- Three-point lighting (key light, fill light and backlight)

- Use of the f/stop

- Proper lighting intensity

- Proper lighting placement

- Skin tones

Key Light

The key light (fig. 14-27) serves as the main light source. It provides sufficient light to operate the camera and acts as the reference point for all other lighting. Place the key light in front of the subject and off to the side at about a 45-degree angle, then elevate it 30 to 35
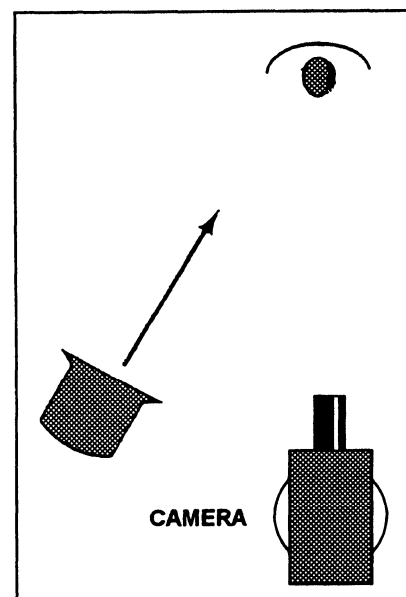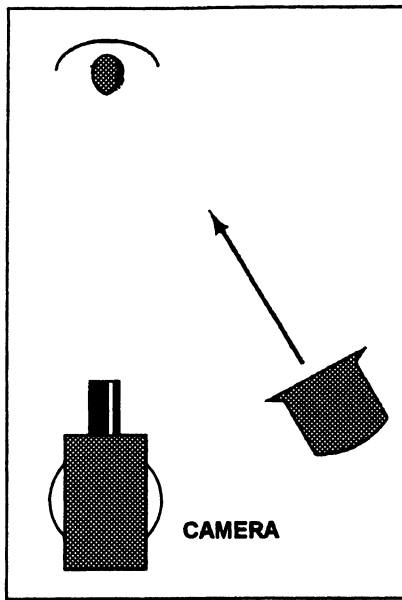

Figure 14-27.—Key light.

Figure 14-28.—Fill light.

Figure 14-29.—Backlight.

degrees. You may eventually make adjustment for any number of reasons, but this is a good place to start.

Fill Light

The fill light (fig. 14-28) fills in and softens the harsh shadows created by the key light. Position it on the opposite side of the camera from the key light and elevate it 30 to 35 degrees.

Backlight

The backlight (fig. 14-29) is used to separate the subject from the background by casting a rim of light across the head and shoulders of the subject. You should place the backlight at an elevated angle, but be careful not to light the top of the subject's head. A good starting point for the backlight is directly behind the subject, elevated 30 to 35 degrees. If your light is mounted on a stand, move it off to the side a little to get the standout of the picture.

Use of the f/Stop

Like any other camera lens, a television camera lens produces optimum results when stopped down one or two stops from its maximum aperture. Depth of field also is increased by stopping down. Therefore, your lighting should have sufficient intensity so you can stop down for the best picture possible.
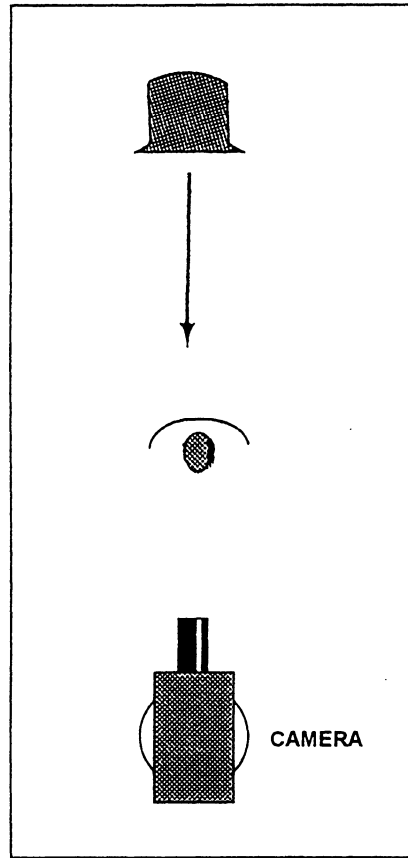
Proper Lighting Intensity

Lighting in television is as important as lighting in basic photography. It has both artistic and technical aspects. Well-planned and executed lighting produces a clear picture with outstanding contrast and depth.

Most television cameras are capable of operating in very low-light levels. However, shooting in dim light may give you video noise and be of generally poor quality.

Proper Lighting Placement

When you set up lighting for a live television production, remember that these productions are continuous; therefore, you must make sure that the lighting you use will be effective from every angle the camera sees in the program. You do not have the luxury of stopping to readjust lighting for each shot. You must make sure that the lighting fixtures and cables do not interfere with the free movement of the cameras. As always, you must plan ahead to avoid embarrassing pitfalls, and then let your television monitor be your

guide when making additions to, and subtractions from, your lighting setup.

Skin Tones

Because skin tones are the only "true" means by which a viewer can adjust the color balance of his television set, it is obvious that skin tones must be reproduced accurately and naturally. Proper lighting is the chief way of accomplishing this task.

One way of reproducing natural skin tones is to light the set evenly. If a talent moves from a light scene to a dark scene, the talent's face should be kept as evenly lighted as possible. The difference between the dark scene and the light scene should be accomplished through backlighting and not the lighting on the talent.

Since extreme shadows take on their own color, you should avoid casting them on the face of the talent. However, do not eliminate facial shadows altogether. Lighten them with fill light instead. A certain amount of shadows are necessary to give character and dimension to the face.

Do not permit color reflections from clothing or scenery to fall on the talent's face. Likewise, avoid the use of colored lights to light the talent (except for special effects). Save the colored lights for lighting the background.

ENG LIGHTING

When you leave the confines of the television news room or production studio for an ENG assignment, your main concern will be the availability of lights. If you are outdoors on a sunny day, there is not much of a problem. But when you move indoors or shoot at night, you will need a portable, lightweight and versatile lighting system that either runs on batteries or plugs into a wall outlet without blowing fines.

Before we cover the components of ENG lighting, keep in mind that the television lighting principles previously covered also apply to ENG lighting.

Portable Lighting Kit

Portable lighting kits will supply you with the lighting equipment you need in most situations. They normally include the following pieces of equipment:

- Lighting instruments

- Tripods

- Short power cables

- Battery packs for each light

- Accessories

Additionally, you may want to include a set of insulated gloves, heavy-duty masking tape or gaffer's tape and at least one extra bulb for each lighting instrument.

There are many commercially available selections of ENG lighting kits. They usually provide at least enough instruments and accessories for your basic lighting needs.

The color temperature of ENG lighting kit instruments is 3200°K. They are usually variable-focus lighting instruments that may be adjusted for use as a key, fill or backlight.

Accessories.

Your light kit should contain accessories, such as barn doors, screens and scrims (fig. 14-30). They are covered in the following text.
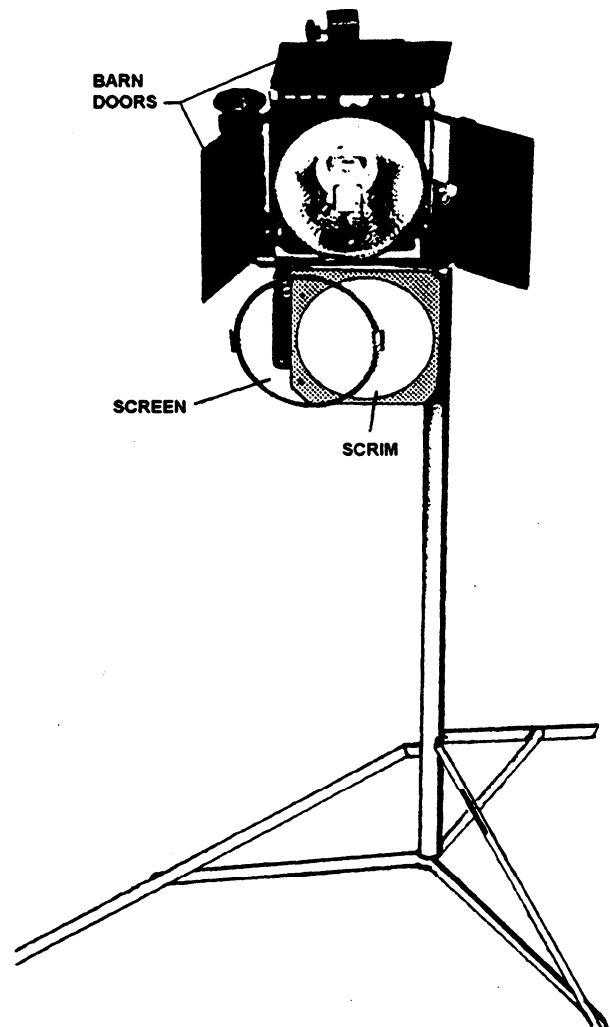

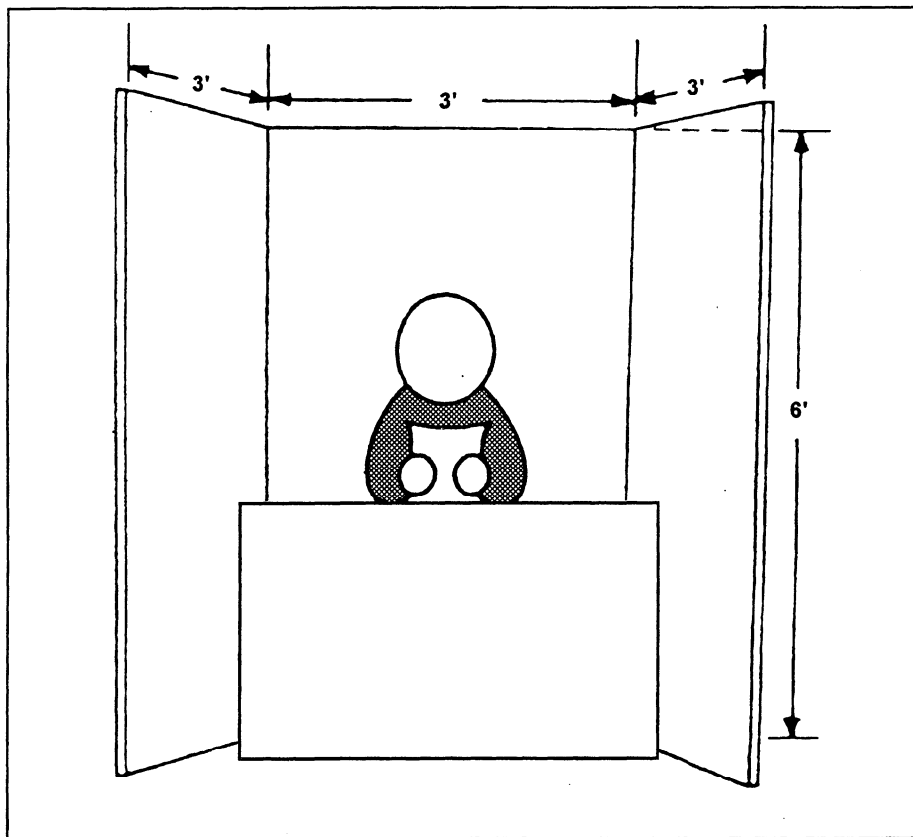Figure 14-30.—Barn doors, screen and scrim.

Figure 14-31.—Basic television set.

BARN DOORS.— Barn doors are metal flaps attached to a ring that is connected to the body of the lighting instrument. They come in either two- or four-door versions. Depending on the type of barn door, you can open or close the doors at the top, bottom or sides to crop the light.

SCREENS.— Screens are small, round or square pieces of metal screening, placed in front of the light to reduce its intensity. They do not change the color temperature of the light. Use screens to reduce or eliminate strong shadows.

SCRIMS.— Scrims are made of clear spun glass or gauze used to diffuse and soften a light. They decrease the intensity of a light without affecting its color temperature.

THE TELEVISION SET

LEARNING OBJECTIVE: Recognize the components of a basic television news set.

All television sets must be designed for the television camera Everything about the set — size,

color, location and props — must be adapted specifically to what the camera sees. A set can be as simple as hung drapes or as complex as a full-scale replica of a ship. However, its actual from must fulfill the artistic aim of orienting the viewers to a place, time or mood.

Just how elaborate your set will be is determined by a number of things, such as the space and materials available, and the manpower you have to design and construct the set.

There are many books on the subject of set design and construction. However, in this chapter we are limiting ourselves to simple set designs that are suitable for use aboard ships and small NBS detachments.

Ideally, you should build an all purpose set — one that is easy to handle and adaptable to a variety of production uses. One set you should consider consists of three 3- by 6- or 4- by 8-foot plywood panels, each 1/4 inch thick. Around the back edges are nailed or screwed 2-by 2-inch furring strips (structural supports) to give it stability (fig. 14-31).

The panels should be hinged together with a type of hardware that allows them to be separated from each

other. Paint the panels flat light blue or green, which will make the skin tones look more natural on color television To reduce glare and reflections from studio lights, you should use flat latex paint.

Before painting the panels, you should check your color choices. Paint small squares of wood and compare them on camera. There must be a distinct difference between set tone and skin tone in order to provide adequate contrast without being excessive. Make sure you select a color that provides suitable contrast when used with either dark or light skin.

SET ERECTION

When you erect a set, you should consider the following three production areas:

- **Camera and microphone boom movement.** The camera support and microphone boom must be allowed space on the set in which to move. This is especially important for camera angle or position changes and for recording quality sound.

- **Talent movement.** The talent must have free access if he moves around the set.

- **Lighting.** The set must provide sufficient lighting for the camera(s).

CREATING THE ENVIRONMENT

A set is used to create the environment or mood of the scene and must be appropriate to the purpose of the program. Sets are generally divided into the following three categories:

- Natural

- Realistic

- Fantasy

Natural

A natural set does not represent any specific locale or period and could be, for example, a plain gray background. This type of set can be used for a training program, because there are no background distractions.

Realistic

Realism can be achieved in three ways. An exact copy of a period or original scene would be a *replica,* while a setting portraying a type of scene, such as an early sailing ship, is *atmospheric.* The suggestion of an office by the use of a desk and chair, or the shadow of a branch to suggest a tree, is *symbolic.*

Fantasy

The use of abstract shapes or textures can create character and mood Unrealistic settings have no direct relationship to the real world, but suggest to the viewer a feeling or sense of the location or time.

TELEVISION SHOOTING TECHNIQUES

LEARNING OBJECTIVE: Identify the basic television shooting techniques.

Television pictures are subject to the aesthetic rules covered in Chapter 12. In fact, because of the wide usage of television, it can even be considered the standard by which we judge most picture composition. However, the following factors unique to television influence picture composition to a certain extent:

- **Small television picture size.** Because of the relatively small size of the television screen, objects must be shown relatively large.

- **Inflexible aspect ratio.** The 3:4 aspect ratio of the picture cannot be changed and all picture elements must be composed to fit it.

- **What the camera sees is what the viewer gets.** The television camera serves as the viewer's eyes; therefore, camera movement, as well as the static arrangement of elements within the frame, must be considered.

- **Time constraints.** Because of the time limitations placed on all television productions, you may not be able to predetermine composition, especially during alive show. Sometimes, all you can do is correct certain compositional errors.

In the television business, the picture on the screen is referred to as a *shot.* A shot may change when either the camera or talent moves. Shots can last for only a few seconds or be as long as a minute or two. In extreme cases, one shot can last the entire program.

As a television camera operator, you must think in terms of shots and master the basic shots of television production.
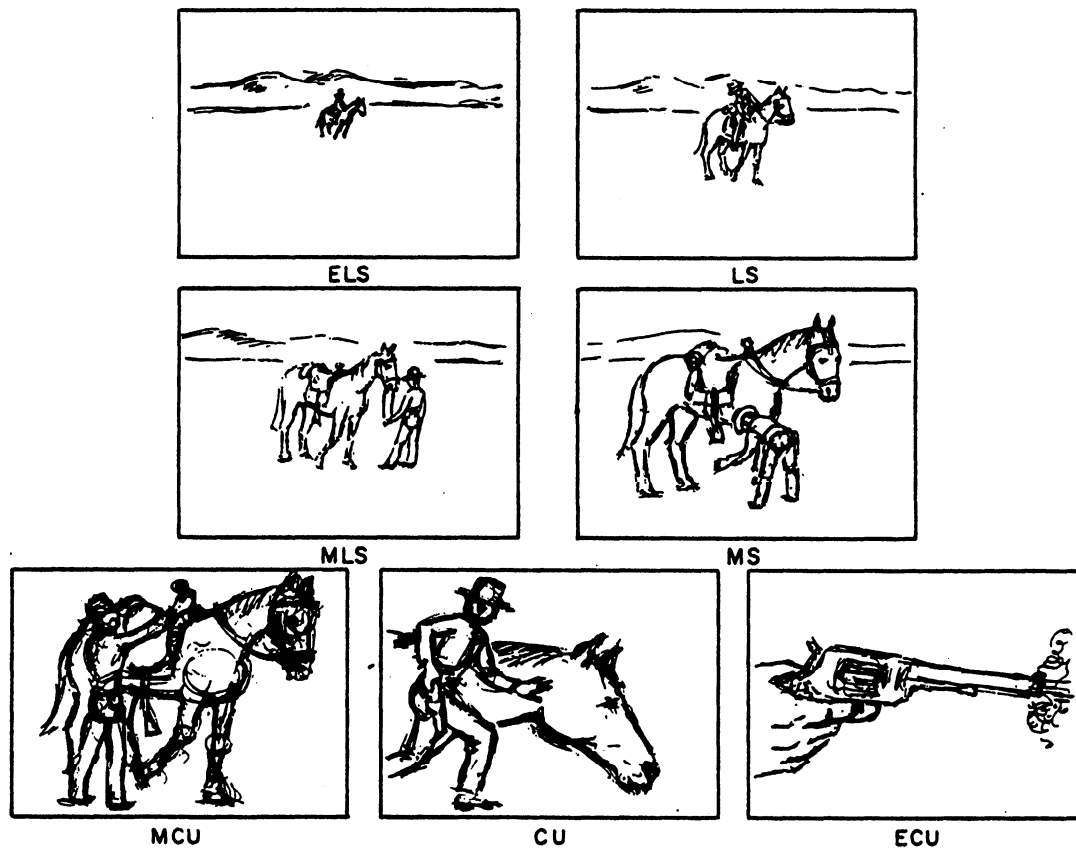
Figure 14-32.—Television shot classification.

SHOT CLASSIFICATION

Shots for television (fig. 14-32) are classified in the following manner:

- Extreme long shot (ELS)

- Long shot (LS)

- Medium long shot (MLS)

- Medium close-up (MCU)

- close-up (CU)

- Extreme close-up (ECU)

Using these terms is the most convenient way for the director to call for the type of shot he wants the camera operator to shoot.

By examining the purposes of the long shot and close-up, you can get an idea of the functions of the other shots. The long shot is used to show as much of the subject as possible while still keeping it recognizable. It is used primarily to show the audience the overall appearance of the whole subject and the subject's relationship to each of the scene elements. This is important, because in subsequent shots (except the extreme long shot), only a relatively small part of the scene will be presented to the viewers. In television work a long shot is used to orientate the viewers or establish the scene.

The close-up is probably the best television shot. It is one of the most efficient compensations for the small size of the television screen and it is essential to creating intimacy and getting the viewer "into" the picture. Close-ups are, and should be, one of the most widely used shots for television. The director calls for a close-up for many purposes, the most common of which is to direct the viewer's attention to a specific object or facial expression.

The extreme long shot and extreme close-up are used to describe shots that include an even greater area or a more limited area, respectively. For example, in figure 14-32, the extreme long shot shows the main subject of the scene as a very small mass surrounded by a vast expanse of background and foreground. Consequently, the extreme close-up shows only the cowboy's finger pulling the trigger to discharge his weapon.
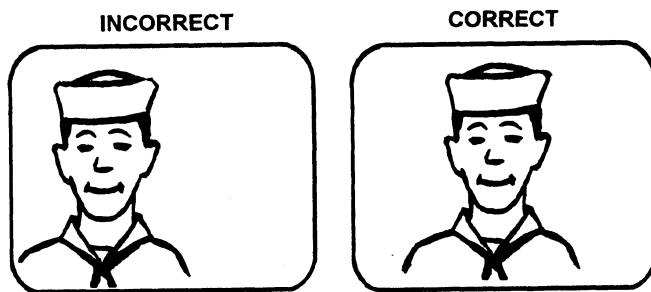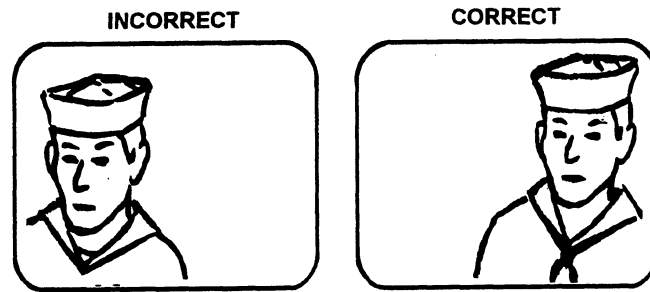
14-30

Figure 14-33.—One-talent framing.

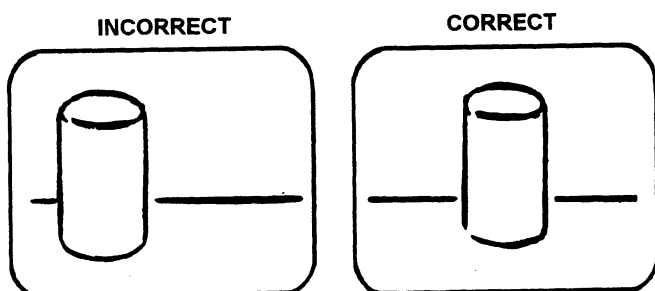Figure 14-35.—Framing talent looking left or right.
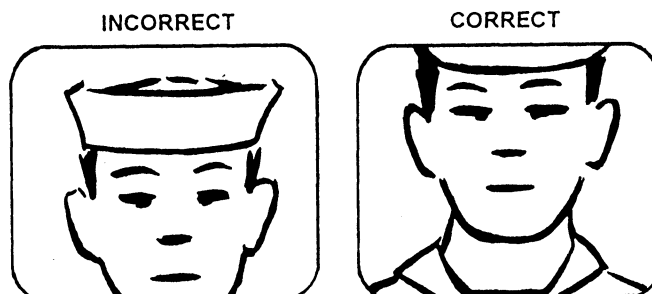

Figure 14-34.—Single-object framing.

Figure 14-36.—Framing talent (extreme close-up).

FRAMING

In the following coverage of framing for television, we will not dwell on photographic composition, because it was addressed in Chapter 12. Instead, we will show you simple line drawing examples of television framing to show you how to present elements within the small 3:4 fixed aspect ratio of the television picture.

Use the following guidelines when you frame subjects or objects:

- **One-talent framing.** When only one talent is talking directly into the camera, place the talent in the middle of the picture to give him maximum emphasis (fig. 14-33).

- **Single-object framing.** When you shoot a single object, frame it directly in the middle of the picture (fig. 14-34).

- **Framing talent looking left or right.** When the talent looks left or right, give him space within the picture to look (fig. 14-35).

- **Framing talent (extreme close-up).** When you want an extreme close-up of the talent, crop space at the top of his head, not the bottom (fig. 14-36).
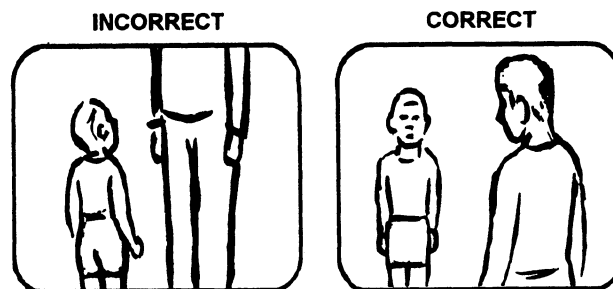

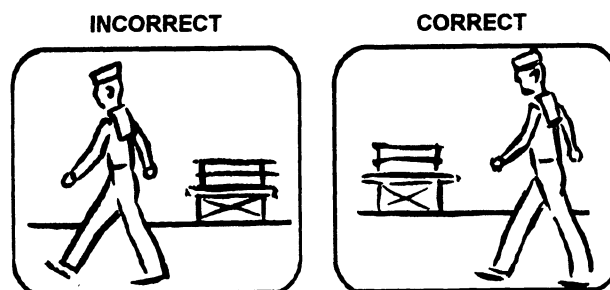Figure 14-37.—Framing talents of different heights.

Figure 14-38.—Framing a moving talent.

- **Framing talents of different heights.** When you frame talents of different heights, do not cut the head off one or the other (fig. 14-37).

- **Framing a moving talent.** When you frame a moving talent, give him room in which to move (fig. 14-38).

14-31
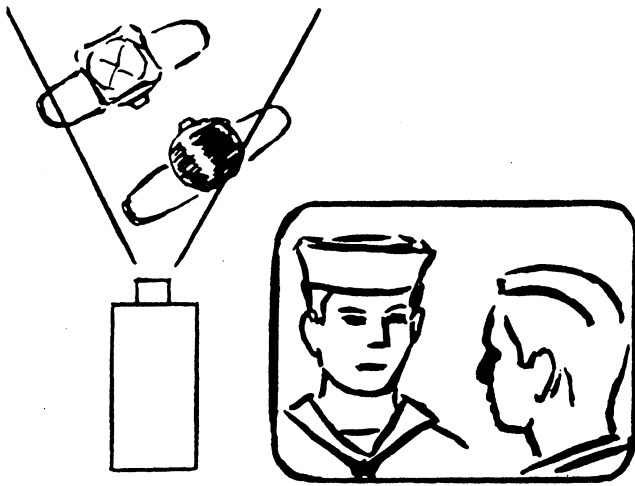
Figure 14-39.—Framing multiple talents.

Figure 14-41.—Improperly placed prop and set area.

- **Framing multiple talents.** When you frame multiple talents, such as a "two-shot," position the camera as shown in figure 14-39. This helps to establish a relationship between the talents.

- **Framing multiple talents with two cameras.** When you frame multiple talents using two cameras, keep the cameras on the same side of the "action axis" shown in figure 14-40. This will prevent the reversal of screen direction in the picture.

Use high and low camera angles with caution. High angles tend to foreshorten legs, while low angles may distort the body and face. Additionally, be aware of set areas or props that seem to be growing out of, or balanced on, a talent's head (fig. 14-41).

AREA OF TALENT INCLUDED

The majority of your television pictures will be of people. Accordingly, it is convenient to identify people shots in terms of the portion of the body to be included in the frame.

To help you recognize image size and to frame your talent effectively, you should use the cutoff line system (fig. 14-42). Cutoff lines are natural dividing lines that will help you produce aesthetically pleasing shots.

Use the cutoff lines in the same manner as the six shot classifications previously covered.

NUMBER OF TALENTS INCLUDED

The shot designations that are easiest for you to remember are the ones that refer to the number of people to be included in the picture. When you shoot only one talent, it is termed a **one-shot,** two talents is a **two-shot,** three is a **three-shot,** and so forth. However, when five
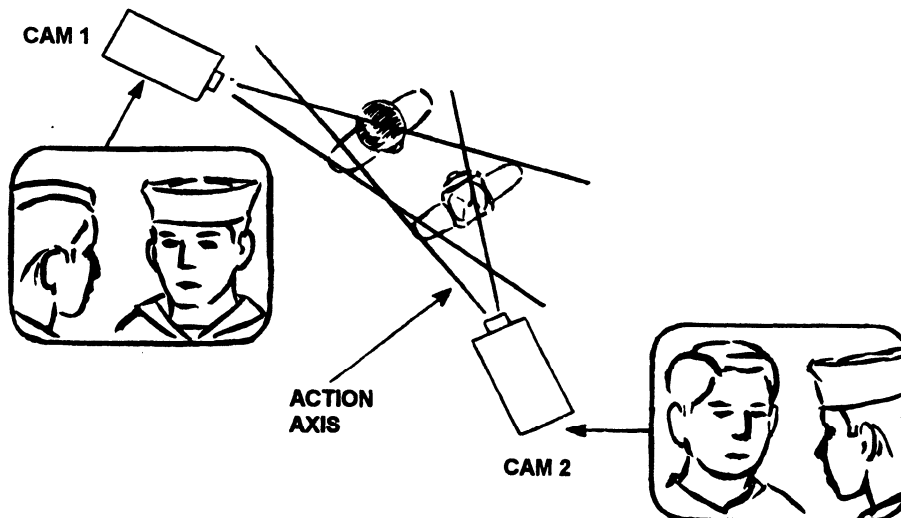
Figure 14-40.—Framing multiple talents with two cameras.
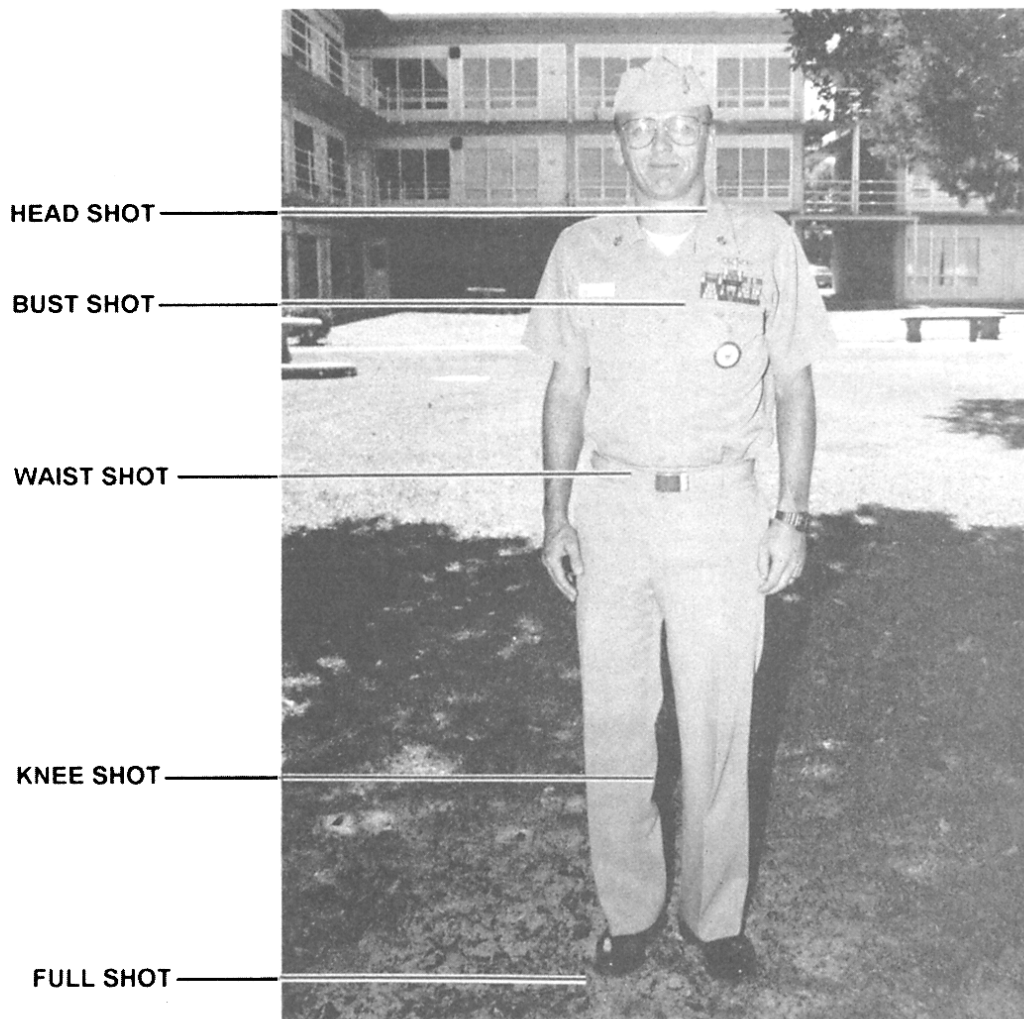
Figure 14-42.—Cutoff lines.

or six people are pictured, it is refereed to as a **wide** or **long shot**

MOVEMENT

Good television needs movement — movement in front of the camera, movement of the camera itself and movement of the picture itself (one picture replacing another).

The movements necessary for good television are divided into the following three categories:

- Primary movement

- Secondary movements

- Tertiary movement

Primary Movement

Movement in front of the camera, usually by the talent, is referred to as primary movement. Primary movement toward or away from the camera is stronger than lateral movement, thus creating more emphasis. Exits and entrances are more impressive when they occur toward or away from the camera.

Remember: you should always lead the lateral movement of the talent with your camera. The viewer wants to know where the subject is going, not where he has been.

14-33
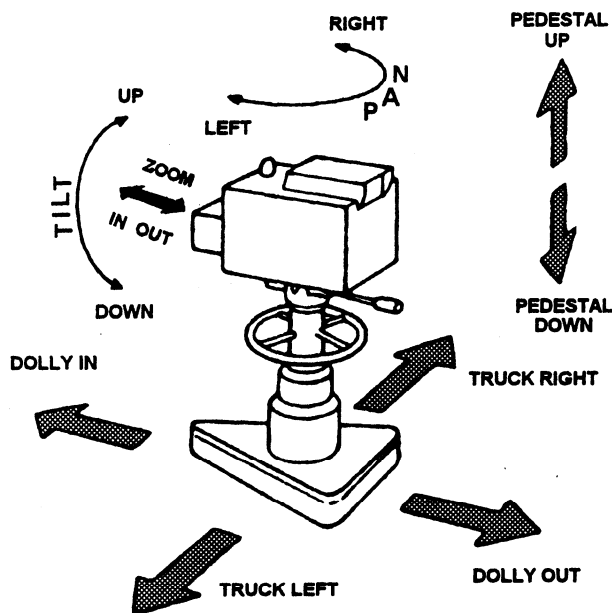
Figure 14-43.—Secondary movements.

Figure 14-44.—Lateral vs. diagonal staging of talent.

Secondary Movements

Secondary movements (fig. 14-43) may be used to follow primary movements or to change or adjust picture composition. You also may use them to emphasize or dramatize a certain portion of a production.

The secondary movements you will become familiar with are as follows:

- Pan
- Tilt
- Dolly
- Zoom
- Truck
- Pedestal

PAN.— A pan is simply the horizontal movement of the camera on a stationary pedestal used to follow primary action. When panning, you should try to avoid "dead space" between subjects. Do this by positioning the talents diagonally instead of laterally, as shown in figure 14-44. From the point of view of the camera, diagonal staging brings the talents closer together.

When the director wants a pan, he will call for **pan left** or **pan right.**

TILT.— Tilting is simply pointing the camera up or down. The reasons for tilting the camera are similar to those for panning the camera. For example, the height of an object can be shown by gradually tilting up on it, or you could tilt down on something to build suspense.

The director usually indicates to the camera operator the tilt he wants by ordering **tilt up** or **tilt down.**

DOLLY.— Dollying is moving the camera toward or away from the subject. You can dolly in to increase gradually the size of an object on the screen, or dolly out to produce an opposite effect. Likewise, dollying decreases or increases the field of view.

The director's orders for dolly are **dolly in** or **dolly out.**

ZOOM.— A zoom is made with a zoom lens. It looks like a dolly and is used for the same purpose. During a zoom the camera does not move; therefore, perspective does not change as it does during a dolly.

The director orders **zoom in** or **zoom out.**

TRUCK.— Trucking is the lateral movement of the camera. It is used to follow lateral subject movement or to truck the camera parallel to stationary objects. In either case, camera-to-subject distance does not change.

Truck left or **truck right** are the director's orders to the camera operator.

PEDESTAL.— When the director calls for a pedestal, the entire camera is either raised or lowered on the pedestal. Pedestaling can provide the audience with a high or low perspective of the subject. The pedestal also can be used to compensate for tall or short camera operators or talents.

Pedestal up or **pedestal down** are the director's commands.
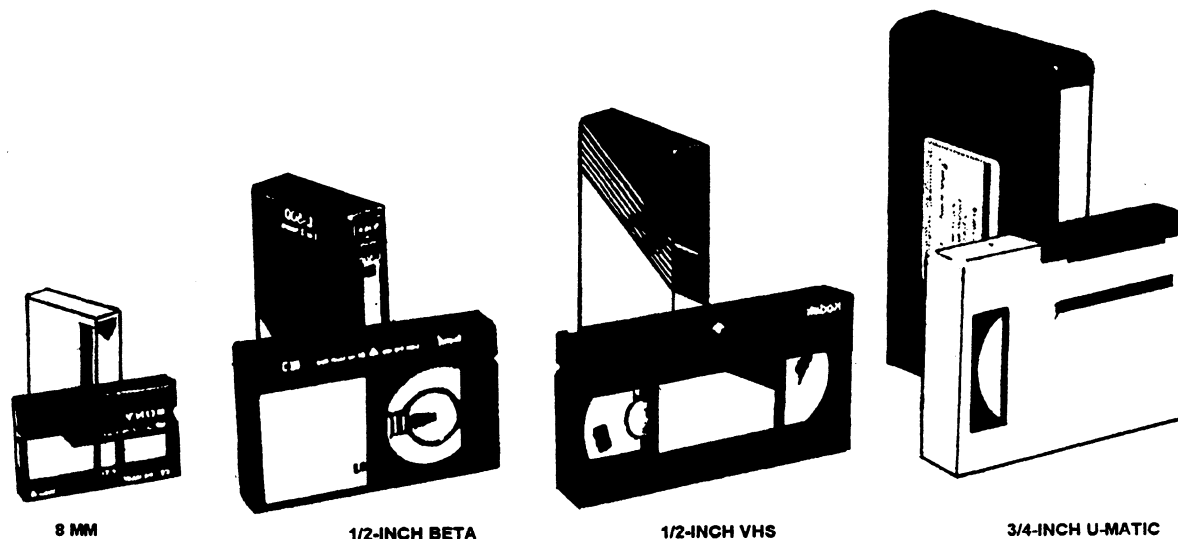
Figure 14-45.—Videotape formats.

Keep in mind that secondary movements must have a valid purpose. Do not make them arbitrarily.

Tertiary Movement

Tertiary movement results from a sequence of shots from two or more cameras. When two or more cameras are used the director can select from a variety of pictures to determine what picture will be telecast and at what time. When more than one camera is used, the director can easily emphasize, de-emphasize or show action and reaction in rapid or slow succession.

VIDEOTAPE EDITING

LEARNING OBJECTIVE: Recognize the fundamental procedures of editing videotape.

When videotape technology was in its infancy, there was only one way to eliminate unwanted shots — physically cut the tape and splice it back together. This method produced edits that were crude at best, because videotape recording is strictly an electronic process.

Today, the complicated process of cutting and splicing videotape is all but a forgotten art. Now you can edit videotape quickly and cleanly through the use of videotape editing systems.

VIDEOTAPE FORMATS

Before we examine the actual videotape editing process, it is important for you to understand that videotape comes in several different formats. Currently, there are a number of videotape formats used in the broadcast industry, including 3/4-inch U-Matic, 1/2-inch VHS, 1/2-inch Beta and 8mm, also called Hi8 (fig. 14-45).

There are different schools of thought as to which formats are broadcast quality and which are not, but it is universally accepted that the 3/4-inch U-Matic and 1/2-inch Beta are industry standard. These formats are the ones most commonly used at NBS detachments.

Keep in mind that VHS tapes cannot be played on Beta videotape machines, and vice versa (even though they both contain 1/2-inch videotape). Likewise, 3/4-inch U-Matic tapes can only be played on 3/4-inch U-Matic machines and Hi8 tapes are compatible only with Hi8 tape decks.

VIDEOTAPE TRACKS

The electronic information found on a videotape is on the following four tracks:

- Video
- Audio
- Control
- Time code address

Video Track

The video track takes up about three-quarters of the space on a videotape. It is recorded as a series of diagonal lines by one or two rapidly spinning tape heads on the head drum of the VCR.

Figure 14-46.—Track location on a 3/4-inch U-Matic videotape.

Audio Track

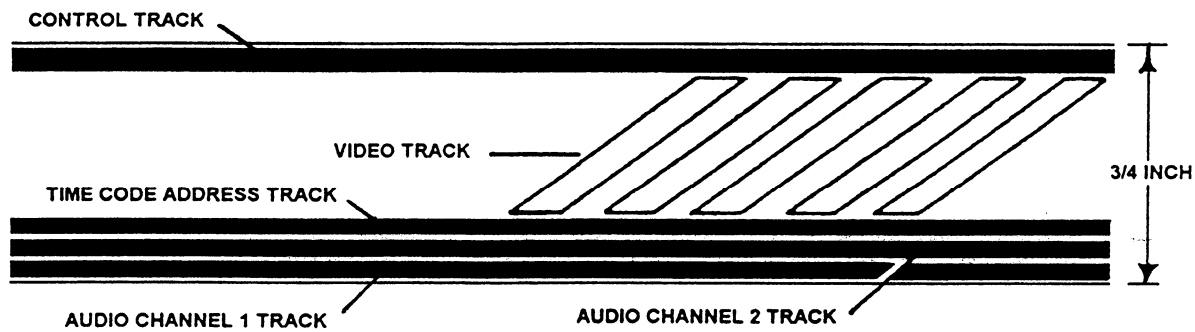Virtually all formats of videotape provide at least two distinct areas for the recording of audio information. They are placed indifferent locations on the videotape but perform the same as regular audiotape.

Control Track

The control track consists of electronic blips or spikes, called sync pulses, recorded in precise intends of one-thirtieth of a second. Since it provides the necessary foundation for the editing process, **you cannot edit without a control track on your blank (source) tape in the insert edit mode.** The insert edit mode is explained later.

Laying the control track on a blank videotape is the first step in the videotape editing process in the insert edit mode. Most television studios have a "black burst" generator that produces a crystal black signal you may record and use as a control track. You also can record a control track from another tape — for example, a tape that has color bars and tone.

Time Code Address Track

The time code address track is used to record cuing information for editing. This information may consist of audio or visual time/frame identification.

Figure 14-46 shows the location of all four tracks on a 3/4-inch U-Matic videotape.

VIDEOTAPE EDITING PROCESS

Videotape editing is essentially a transfer process in which a playback VCR, containing the recorded segments, transfers its material onto an edit/record VCR that assembles the various segments into a finished form. The editing control unit (ECU) is equipped with

highly sophisticated electronic circuitry and allows the operator to control exactly where the old material on the edit/record VCR will end and the new material playing in from the playback VCR will begin.

The precision of the edits depends largely on your reaction time and skill. You must precue both videocassette tapes accurately before the editing begins, since you will control exactly where and when the edit will occur while the two VCRs are rolling.

You will do your editing in what is called an editing cell. Most NBS detachments have two or more editing cells containing the following equipment:

- Playback VCR

- Edit/record VCR

- Television monitor for the playback VCR

- Television monitor for the edit/record VCR

- Audio mixer

- ECU

A typical editing cell is shown in figure 14-47.

EDITING MODES

On an editing cell, you may make either assemble edits or insert edits. Both are explained in the following text.

Assemble Edits

In the assemble editing mode, the ECU adds control track and program footage (both audio tracks and the video track) to the edit/record VCR at a predetermined in-edit point. The edit/record VCR continues recording the new information and the control track until it is stopped. When you are assemble editing, you are inserting a new control track at each in-edit point and
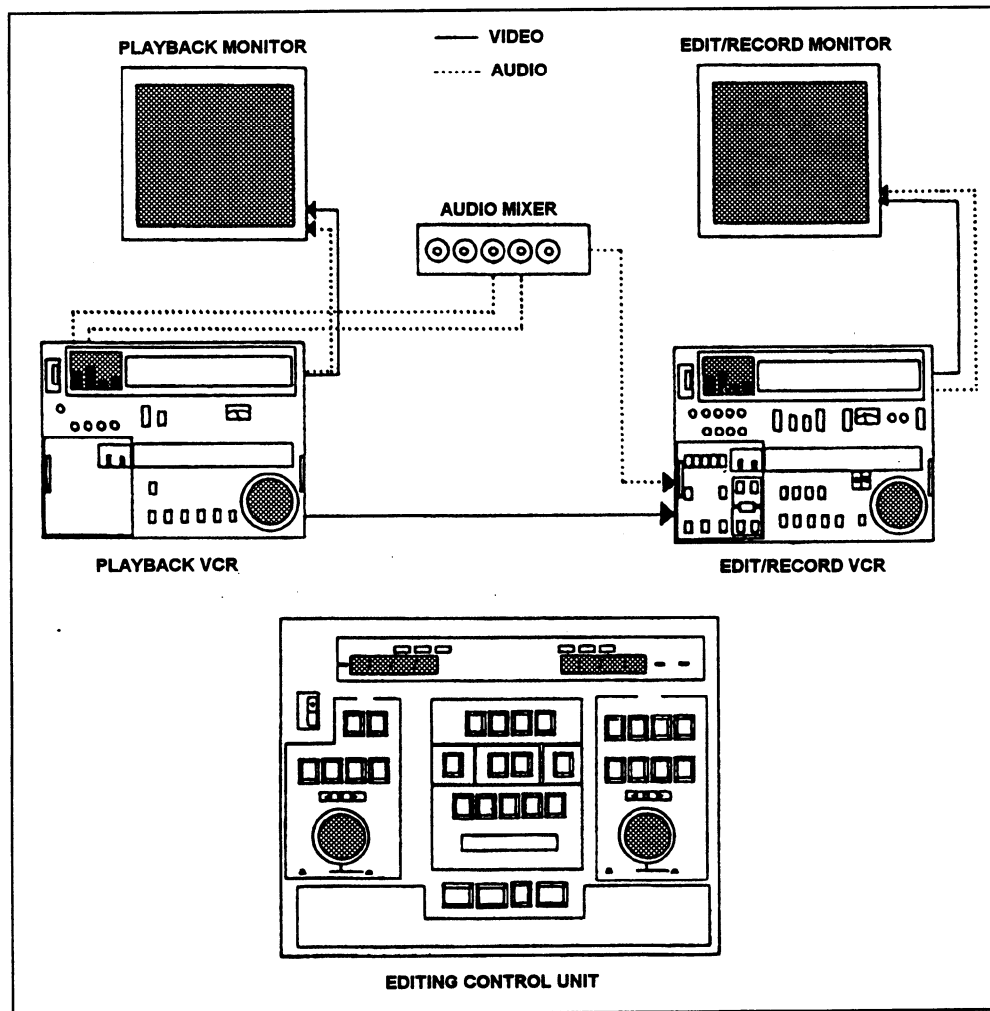
Figure 14-47.—Videotape editing cell.

ending a control track at each out-edit point.Your video may be unstable (picture tearing or breakup) at the edit points during playback Therefore, you should allow for extra video after your intended stop/out-edit point — otherwise, you will not be able to edit onto the last part of the video. Assemble edits are very convenient because you simply add segments to build the video story or program.

Insert Edits

Insert editing allows you to add or change video or audio separately or together without affecting the control track. As you insert the new material over the existing information, you use the control track already established on the edit/record videocassette to lock the signal into synchronization.

The main drawback of insert editing is that you must lay along enough control track on the tape before you start editing. A one-hour program tape requires you to lay one hour of black or color bars and tone before you start the editing process.

NOTE: After laying the control track in the assemble mode, be sure to switch to the insert mode on the ECU. If you remain in the assemble mode when you make your first video or audio edit, the end of the edit will look like a green flicker on the television monitor. This is caused by a break in the control track There is no way to correct this break without relaying the control track for the entire length of the tape. The best approach for you to take is to stay in either the assemble or insert

EDITING TECHNIQUES

The two basic editing techniques in videotape editing are **continuity cutting** and **compilation cutting.** Both are explained in the following text.

Figure 14-48.—Cutaway.
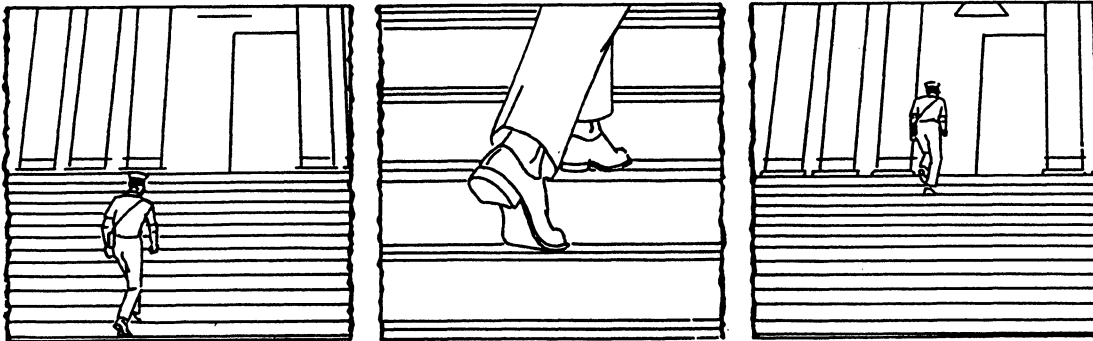
Figure 14-49.—Cut-in.

Continuity Cutting

Continuity cutting is the most commonly used method of editing videotape for news or feature releases. It is used when the storytelling is dependent on matching consecutive scenes. Continuity cutting consists of matched cuts in which continuous action flows from one shot to another.

The three transitional devices associated with continuity cutting are the **cutaway, cut-in** and **crosscutting.**

CUTAWAY.— When the action shown is not a portion of the previous scene, a transitional device, known as a cutaway, is used to change positions, movements or characters or to denote a lapse of time. This eliminates a mismatch, or jump cut, that would cause the segment to appear jerky or out of sequence. Cutaways are often termed *protection, reaction, insert* or *cover shots* and are thought of as secondary action shots.

For example, if the main thought is centered around a parade, cutaways might consist of closeup shots of the crowd Children may be shown watching intently, eating candy or applauding; adults may be wearing different expressions of emotion or carrying children on their shoulders (fig. 14-48). These shots are of human interest and are related to the main story, but are not actually a primary part of it.

If you have a good selection of cutaways, often you can make a marvelous story out of an otherwise drab and commonplace event. The cutaway can cover a multitude of camera operator errors and result in the formulation of an exciting segment.

Cutaways should last between three and five seconds.

CUT-IN.— Another method used to denote a lapse of time is the cut-in. Unlike the cutaway, the cut-in is a part of the primary action, rather than the secondary action. For instance, to denote a person climbing a long flight of stairs, you establish the individual at the start of the climb, then cut to a close-up of feet as they take the steps. After you establish the shot (three to five seconds), you cut back to the person at the top of the stairs (fig. 14-49). A person can appear to walk a city block in just a few seconds by showing feet walking or a hand carrying a briefcase.

14-38

Figure 14-50.—Crosscutting.

CROSSCUTTING.— Crosscutting is the old standby of videotape editing. In crosscutting, you use shots from two different actions or events that will finally be related. A time-honored example is the "meanwhile, back at the ranch" style, or the hero riding hard to save the life of the heroine who has been chained to a buzz saw by the villain (fig. 14-50). The action would be cutback and forth between the desperate rider and the saw as i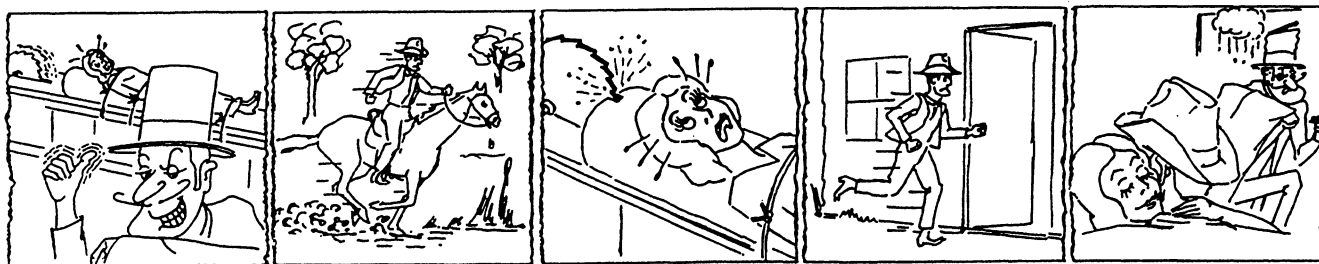t comes dangerously close to the heroine's head, showing the progress of each, then finally relating them as the rider arrives at the last moment to save the heroine.

Compilation Cutting

The second method of videotape editing is compilation cutting. This is used in documentary-style stories of surveys, reports, history or travelogues. Segments are tied together through narration. The narrative explains the shots, which may have little or no matching relation. These shots or scenes maybe long or short shots, or they may go from longshots to close-ups without any special transitions.

BASIC EDITING PROCEDURES

Before we cover the basic procedures of editing videotape, keep in mind that the editing procedures and techniques in place at your NBS detachment may differ from what is portrayed in this section. For training purposes, let's assume a script has been written and the primary narration has been recorded on the production tape. (This is a normal news/production requirement.) Atypical editing sequence might look like this:

1. The editor will work from a log that lists all of the scenes on the tape(s). It may be prepared at the time of the shooting or as the tape is being reviewed at the station or your office. The log will briefly describe the scene and indicate where it is located on the tape (using the counter on the playback VCR).

2. The producer, editor and sometimes the reporter will decide which scenes to use, the order in which to show the scenes and the amount of time you have to tell the story. In some instances (especially at small NBS detachments and aboard ships), one person will make all of these decisions.

3. The editor prepares a blank videocassette with countdown leader and enough control track to cover the length of the story. He then loads it into the edit/record VCR.

4. The raw video is loaded into the playback VCR. Now the editing process is ready to begin.

5. The story is assembled and edited according to the predetermined sequence. Sometimes the audio track is recorded first and the visuals added later. At other times, the sequences are assembled in order, depending on the type of story and available footage.

6. The editor labels the smooth tape with the title of the story, date and run time. A supervisor will review the story and make corrections (if necessary) before it airs.

The technical side of the editing process is fairly easy to learn. With today's technology, the procedure is almost foolproof. Nevertheless, a good videotape editor must have a thorough knowledge of many related skills to provide viewers with a simple, yet effective, message.

VIDEOTAPE SCRIPTING

LEARNING OBJECTIVE: Identify the format of a script that accompanies a video news release.

When you write a script to go with a video news release, make sure your pictures tell the story. The narration should supplement them, not overpower them.

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┌─────────────────────────────────────────────────────────────────────────────┐
│ PUBLIC AFFAIRS OFFICE                         TELEPHONE: (904) 456-5070       │
│ NAVAL AIR STATION SAMARA                                    456-5071          │
│ POINT KENT, FLORIDA 32505-5484                        DSN: 922-5070           │
│                                                       FAX: 456-5072           │
│                                                                               │
│ FOR FURTHER INFORMATION, CONTACT:          LCDR LEE MAZZILLI (PAO)            │
│                                            JO1(AW) JUAN AGUSTO (APAO)         │
│                   OFFICIAL NEWS RELEASE                                        │
│                     (FOR TELEVISION)                                          │
│ PAGE 1 OF 1                                    RELEASE NO. 17-95              │
│                                                                               │
│ ARMED FORCES DAY                                           May 15, 1995       │
│                                                                               │
│ 60 SECONDS                                     FOR IMMEDIATE RELEASE          │
├─────────────────────────────────────────────────────────────────────────────┤
│ VIDEO                             AUDIO                                        │
│                                                                               │
│                        NEWSCASTER:                                            │
│                                                                               │
│ NEWSCASTER:            Armed Forces Day was celebrated today at Naval Air     │
│                        Station Samara, and the red carpet was rolled out for  │
│                        seven thousand visitors.                               │
│                                                                               │
│ SAILORS MARCHING       (ON CUE) Many guests arrived early (NAT SOUND) enough  │
│ (NAT SOUND)            to see a contingent of sailors parade on Burnitz       │
│                        Field. They are recent graduates of Computer Repairman │
│                        "A" School and will soon report to their assignments   │
│                        with ships of the fleet. Many spectators at today's    │
│                        parade have sons or daughters marching in the ranks.   │
│                                                                               │
│ ADMIRAL ON STAND       (ON CUE) Rear Admiral Davey Jones, (NAT SOUND) the     │
│ (NAT SOUND)            Vice Chief of Naval Education and Training, inspected   │
│                        the graduates as they paraded by the reviewing stand.  │
│                                                                               │
│ EXHIBITS               (ON CUE) Visitors also saw special (NAT SOUND) exhibits│
│ (NAT SOUND)            showing the missions of the tenant commands at the air │
│                        station. A panel of judges, made up of Samara          │
│                        residents, chose the most outstanding exhibit.         │
│                                                                               │
│ MAYOR                  (ON CUE) Mayor Jack Crevalle awarded (NAT SOUND) the   │
│ (NAT SOUND)            top prize to Petty Officer First Class Kenneth Aidem,  │
│                        representing the air station's Crash and Salvage       │
│                        Division.                                              │
│                                 # # #                                         │
└─────────────────────────────────────────────────────────────────────────────┘
```

Figure 14-51.—Video news release

A video release (fig. 14-51) is similar in appearance to the radio news releases shown in Chapter 13 (administrative information, four-unit heading, release line, etc.), except you use two columns for the actual script. The left column is devoted completely to the video, or visual, section and the right column to the audio, or sound, section of the release.

Note that all of the information in the video column is in capital letters. This tells the news director that the information is there for information purposes only and is not to be read by the talent.

Below each video entry (except the first), in parentheses, is the phrase NAT SOUND. This tells the newscaster he will speak over the natural sound

recorded when the scene was shot. If there was no natural sound present, you will use "SIL" for silent.

At the beginning of paragraphs two through four in the audio column are the words *ON CUE.* This instructs the newscaster to look at the television monitor in the studio and wait for the scene described in the video column to appear before continuing.

In a standard video news release, lines average five words in length and are read at an average pace of 28 to 32 lines per minute.

TELEVISION PROGRAM MATERIALS

LEARNING OBJECTIVE: Identify the television program materials available from AFRTS-BC and the Navy Motion-Picture Service (NMPS).

AFRTS-BC provides television news, information and entertainment programming for the exclusive use of AFRTS outlets, including all NBS detachments. It is the only source authorized to negotiate for, procure and distribute commercial and public broadcast programming.

AFRTS-BC acquires its programming at a minimal rate because of a special agreement with distributors, performers' unions, guilds, music licensing organizations and industry regulatory agencies. Therefore, special handling procedures and use restrictions are required to ensure security of the videocassettes and prevent copyright violations. These regulations and restrictions protect the rights of the commercial broadcasting industry as guaranteed by the U.S. Civil Code.

This section is intended to acquaint you with the different program materials offered by AFRTS-BC. For more detailed information, consult *Armed Forces Radio and Television Service (AFRTS) Program Materials, DoD Directive 5120.20-R, Appendix F.*

TYPES OF AFRTS TELEVISION SHIPMENTS

AFRTS currently circulates programs to outlets on videocassettes. Program packages are broken down into the following categories:

- Television weekly (TW)
- Television weekly "B" (TWB)
- Television weekly "C" (TWC)
- Television priority "A" (TPA)
- Television priority "B" (TPB)
- Television library (TL)
- Television temporary library (TTL)
- Television material (TM)

Television Weekly (TW)

The Television Weekly (TW) is the largest package of television programs (approximately 80 hours) supplied weekly to full-service television outlets. This package features U.S. broadcast and cable network programs, preteen and preschool programs, talk shows, soap operas, quiz shows, movies, mini-series, information, religious and filler programming. Normally, one package is in use while two others are either at the outlet waiting to be used or en route. The TW package is circuited, meaning it is passed from one station to another along a predetermined "circuit" of several stations.

Television Weekly "B" (TWB)

The Television Weekly "B" (TWB) is essentially the same as the TW package but does not contain the preteen and preschool programming. It is circuited to Super-SITE and SITE ships and contains approximately 72 hours of programming.

Television Weekly "C" (TWC)

The Television Weekly "C" (TWC) is a scaled-down version of the TWB (roughly 42 hours of programming) and is circuited to smaller ships and submarines.

Television Priority "A" (TPA)

The Television Priority "A" (TPA) contains about 12 hours of timely programming. It is not circuited but is sent directly to authorized outlets (primarily Navy ships) for use at the earliest possible date. If your detachment has access to SATNET (the worldwide AFRTS 24-hour satellite network), you will not receive the TPA package.

Television Priority "B" (TPB)

The Television Priority "B" (TPB), while not currently in use, is reserved for possible future application.

Television Library (TL)

The Television Library (TL) contains accountable library videocassettes shipped periodically to full-service, land-based outlets and fleet circuit managers for permanent retention. It is used to supplement normal programming or to fill emergency requirements.

Television Temporary Library (TTL)

The Television Temporary Library (TTL) consists of accountable library videocassettes provided to meet special short-term requirements, such as holidays and anniversaries, or when AFRTS-BC requires that the materials be returned within one year. Return dates and instructions appearing on TTL packing lists must be strictly followed.

Television Material (TM)

The Television Material (TM) contains nonaccountable library materials provided for single or repeated use and subsequent local disposal. Other usage conditions may exist and will be explained on the packing list.

CUING AFRTS VIDEOCASSETTES

Most AFRTS videocassettes that are longer than 15 minutes contain AFRTS system cues at the end of the programs. The system cue is contained on a five-second segment that identifies AFRTS as the program source. It also alerts the control board operator that he must make a transition in five seconds.

Videocassettes 15 minutes in length or less do not contain system cues but are cue-dotted by AFRTS-BC. Cue-dotting is accomplished by inserting the proper series of cues electronically during videocassette editing. The "dots" are actually small white squares that appear in the upper right-hand corner of the television screen. Multiple videocassette programs are cue-dotted at 10, seven and two seconds from the end of each tape, except the last tape of the program. This tape will contain an AFRTS system cue instead of the cue dots.

EDITING AFRTS TELEVISION MATERIALS

AFTRS television program materials are intended to be used as received. Outlets may not duplicate, edit or delete any part except in the following circumstances:

- To remove host-country sensitivities. (This must be done on a duplicate (dub) tape and not the original AFRTS-BC videocassette.)

- To air short excerpts for the promotion of upcoming programs (not to exceed two minutes).

- To remove commercials or commercial slugs, such as "Place Commercial Here" and "Splice Here." If this happens, board-fade the unwanted section and cover it with an AFRTS or locally-produced spot. **NOTE:** Do not confuse commercials with sponsor or product mentions or identification, visual or aural, that are integrated into openings and closings in a way that makes their retention necessary for program continuity.

- To shorten the length of videocassettes specially designated by AFRTS-BC for future use.

- To repair damaged videocassettes.

Make sure you consult *Armed Forces Radio and Television Service (AFRTS) Program Materials, DoD Directive 5120.20-R, Appendix F,* for further details.

HANDLING AFRTS VIDEOCASSETTES

Cleanliness is paramount when you handle AFRTS or any other types of videocassettes. Areas where television materials are stored or handled should be clean at all times and, if possible, ventilated with faltered air so that dust is blown out, rather than drawn in. AFRTS recommends that smoking, eating and drinking be prohibited in these areas.

Videocassettes must be kept in their shipping containers in a secure atmospherically controlled environment until they are ready for use and then returned immediately after use. This keeps the tapes clean and virtually eliminates the possibility of mixing programs with other videocassette shipments.

In general, the recommended storage conditions for videocassettes are a relative humidity of 50 to 60 percent and a temperature of between 60 and 80 degrees.

Do not leave videocassette containers open! An open container is an invitation to dust and debris. If you have a dirty container, remove the videocassettes and vacuum the container. When the container is clean, replace the videocassettes in the order specified on the packing list.

NAVY MOTION PICTURE SERVICE

The Navy Motion Picture Service (NMPS) in Brooklyn, N.Y., provides most Navy ships with fret-run movies on Beta videocassettes. The tapes maybe aired either at sea or in port. Eligibility for NMPS service is based primarily on deployment duration, tape storage capability and security.

You may retain NMPS videocassettes for three or four years, depending on the lease agreement with the particular movie companies and NMPS. Lease expiration dates are indicated on each videocassette case and its accompanying synopsis card.

For further information about the NMPS Videocassette Program, refer to the *Navy Entertainment Movie Program Administration and Operations Manual,* NAVMILPERCOM 1710.1 series.